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Irrigation Revenue
report: Bombay Presy.
1899-1900 to 1901-02 (triennial)

BOMBAY BRANCH
OF THE
ROYAL ASIATIC SOCIETY.
TOWN HALL, BOMBAY.

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TRIENNIAL IRRIGATION REVENUE REPORT

OF THE

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BOMBAY PRESIDENCY

(EXCLUDING SIND)

FOR THE

TRIENNIUM ENDING 1901-1902.

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TRIENNIAL IRRIGATION REVENUE REPORT, BOMBAY PRESIDENCY (EXCLUDING SIND), 1899-1900 to 1901-1902.

General Remarks.

This is the first Triennial Revenue Report of Irrigation Works prepared in accordance with the orders of the Government of India conveyed in their Resolution No. 670—C.W.I., dated the 6th June 1901, contained in Government Resolution No. W.I.—1396, dated 5th July 1901.

2. The report is intended to contain the statistical information of which it is important to maintain a permanent and continuous record. Accordingly statements showing various working details and the results attained in four successive triennial periods have been prepared and brief general remarks appended to each.

3. The works in the Deccan and Gujarát for which both Capital and Revenue Accounts are kept are divided into two classes—Major Irrigation Works, and Minor Works and Navigation—and are used for irrigation purposes only.

The "Major Irrigation Works" are—

Protective Works.

1. Nira Canal.
2. Mhasvad Tank.
3. Shetphal Tank.
4. Chankapur Tank.
5. Maladevi Tank.

Productive Works.

6. Hathmati Canal.
7. Lower Panjhra River Works.
8. Kadva River Works.
9. Pravara River Works—Lakh Canal.
10. Mutha Canals.
11. Ekruk Tank.
12. Krishna Canal;

and those classed under the head "Minor Works and Navigation" are—

13. Khari Cut.
14. Hartala Tank.
15. Mhasva do.
16. Jamda Canals.
17. Parsul Tank.
18. Pravara River Works—Ojhar Canal.
19. Bhatodi Tank.
20. Matoba do.
21. Kasurdi do.
22. Shirsuphal do.
23. Bhadalvadi do.
24. Koregaon do.
25. Ashti do.
26. Revari Canal.
27. Upper Man River Works.
28. Yerla River Irrigation Works.
29. Chikli Canal.
30. Maini Tank.

31. Muchkundi Tank.
32. Gadikeri do.
33. Dambal do.
34. Medleri do.
35. Madag do.
36. Asundi do.
37. Mavinkop do.
38. Gokak Canal—Second Section.
39. Gokak Canal—First Section and Storage Works.

4. Of these 39 works, 36 are in operation, 2 (Chankapur and Maladevi Tanks) under construction and the remaining one (Gokak Canal—Second Section) is in abeyance.

5. The following table gives the average rainfall at all stations connected with works in operation at which it is gauged :—

Average of 12 years, 1890-1891 to 1901-1902.	During			Average for			
	1899-1900.	1900-1901.	1901-1902.	1899-1900 to 1901-1902.	1896-1897 to 1898-1899.	1893-1894 to 1895-1896.	1890-1891 to 1892-1893.
Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
21·41	10·70	19·09	18·95	16·25	21·34	23·47	24·58

The rainfall during the triennium under report was below the average and considerably less than that of the triennia ending 1893 and 1896.

6. The Capital outlay and financial results of the works classed as Major Works—Protective—are shown in the following table :—

	Average for			
	1899-1900 to 1901-1902.	1896-1897 to 1898-1899.	1893-1894 to 1895-1896.	1890-1891 to 1892-1893.
	Rs.	Rs.	Rs.	Rs.
Capital outlay to end of triennial period	86,81,773	80,79,379	78,28,357	73,72,902
	Acres.	Acres.	Acres.	Acres.
Area irrigated	52,698	48,090	29,772	28,144
	Rs.	Rs.	Rs.	Rs.
Revenue	1,93,628	1,35,585	99,927	77,032
Working Expenses	69,161	83,407	77,652	57,536
Net Revenue	1,24,467	52,178	22,275	19,496

7. There is a steady increase in the area under irrigation and revenue earned. The working expenses show signs of decreasing, the need of which is constantly impressed on the local officers. The net revenue of the triennium under review shows a return of nearly 1½ per cent. on the Capital spent, about eighty-seven lákhs, excluding interest charges. Omitting outlay on the two works under construction and the Shetphal Tank brought in operation only during the rabi season of 1901-1902, the percentage of return comes to 1·60, showing a very satisfactory increase over that of the previous triennia. The general remarks at foot of the detailed statements describe the progress of each individual work.

8. The following statement gives Capital outlay and financial results in respect of the works classed as Major Works—Productive :—

	Average for			
	1899-1900 to 1901-1902.	1896-1897 to 1898-1889.	1893-1894 to 1895-1896.	1890-1891 to 1892-1893.
	Acres.	Acres.	Acres.	Acres.
Area irrigated	26,904	30,096	25,709	26,631
	Rs.	Rs.	Rs.	Rs.
Capital outlay to end of triennial period	1,10,53,704	1,09,50,247	1,08,71,463	1,06,19,678
Revenue	3,65,465	3,58,057	3,61,360	3,29,807
Working Expenses	1,62,162	1,83,170	1,38,814	1,43,636
Net Revenue	2,03,303	1,74,887	2,22,546	1,86,171

9. The Capital outlay under this head amounts to nearly Rs. 1,11,00,000 upon which a return of nearly $1\frac{3}{4}$ per cent. is obtained. The smallness of the profit is mainly due to the meagre use made of the water available by the cultivators who prefer to depend on the rainfall. The working expenses are proportionately high owing to the restricted area of cultivation. The total area under irrigation, however, remains fairly stationary.

10. The Capital expenditure on (1) Lower Panjhra River Works, (2) Kadva River Works, (3) Pravara River Works—Lakh Canal, and (4) Mutha Canals, originally classed as Productive Works and still maintained on the list of works of that class, has from 1885-86 been met from funds provided under "Minor Works and Navigation" as they were found not to fulfil the conditions prescribed in the case of Productive Works, the amount so charged being Rs. 9,08,391. This expenditure is included in the figures entered in the table in paragraph 8.

11. The Capital outlay and financial results in respect of "Minor Works and Navigation—Works for which Capital and Revenue Accounts are kept" are as follows:—

	Average for			
	1899-1900 to 1901-1902.	1896-1897 to 1898-1899.	1893-1894 to 1895-1896.	1890-1891 to 1892-1893.
	Acres.	Acres.	Acres.	Acres.
Area irrigated	40,863	39,146	25,359	25,049
	Rs.	Rs.	Rs.	Rs.
Capital outlay to end of triennial period	81,08,867	76,65,147	75,52,399	73,15,128
Revenue	1,06,373	1,36,683	1,17,402	99,304
Working Expenses	1,59,793	1,00,304	94,392	76,574
Net Revenue	—53,420	36,379	23,010	22,730

The works, as a whole, are run at a loss. The working expenses per acre are lower than in the previous class, however, and the area under irrigation shows a steady improvement. Details of these works are given in the individual statements.

12. Besides the works detailed in paragraph 3 under Minor Works and Navigation, there are two classes, namely (1) Works for which only Revenue Accounts are kept, and (2) Works for which neither Capital nor Revenue Accounts are kept.

13. The particulars of "Works for which only Revenue Accounts are kept" are as follows:—

	Average for			
	1899-1900 to 1901-1902.	1896-1897 to 1898-1899.	1893-1894 to 1895-1896.	1890-1891 to 1892-1893.
	Acres.	Acres.	Acres.	Acres.
Area irrigated	131,372	145,985	145,036	145,782
	Rs.	Rs.	Rs.	Rs.
Revenue	5,53,072	5,64,244	5,47,497	5,33,434
Working Expenses	2,32,089	2,19,698	2,65,652	1,87,877
Net Revenue	3,20,983	3,44,546	2,81,845	3,45,557

The works included are small Tanks and Bandharas and are a source of considerable revenue.

The whole question of maintaining this class of works is under careful consideration, and probably a much larger number will be brought on the returns of this Department.

14. Particulars in respect of Works for which neither Capital nor Revenue Accounts are kept are as follows:—

	Average for			
	1899-1900 to 1901-1902.	1896-1897 to 1898-1899.	1893-1894 to 1895-1896.	1890-1891 to 1892-1893.
	Rs.	Rs.	Rs.	Rs.
Revenue	1,785	537	535	771
Expenditure	1,19,049	62,686	28,032	27,977

The expenditure under this head is on drainage channels, surveys, &c., and calls for no remarks.

CONSOLIDATED STATEMENT.

MAJOR WORKS—PRODUCTIVE WORKS.

DECCAN AND GUJARAT TRIENNIAL

Consolidated statement for Major

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Acres.	Acres.	Acres.
1. Area irrigated Kharif	17,050	26,549	30,745
2. Do. Rabi	23,806	31,021	28,924
3. Do. Total	40,856	57,570	59,669
	Rupees.	Rupees.	Rupees.
4. Capital Outlay direct and indirect during the year.	1,38,562	2,49,155	2,14,677
5. Do. do. to end of year...	82,17,941	84,67,096	86,81,773
6. Revenue—Total (Assessment)	1,87,274	2,02,282	2,72,906
7. Total (Collection)	1,73,956	1,55,061	2,52,089
8. *Deduct* Refunds	26	19	178
9. Working Expenses	75,882	62,084	69,517
10. Net Revenue based on Assessment ...	1,11,392	1,40,198	2,04,389
11. Net Revenue based on Collection ...	98,048	92,958	1,82,394
12. Percentage do. on Capital	1·19	1·10	2·10
13. Gross Assessed Revenue per acre irrigated ...	4·58	3·51	4·59
14. Collection per acre irrigated	4·26	2·69	4·23
15. Working Expenses do.	1·86	1·08	1·17

REPORT, 1899-1900 TO 1901-1902.

Works—Protective Works.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Acres.	Acres.	Acres.	Acres.	
24,781	16,319	14,069	13,602	
27,917	31,771	15,703	14,542	
52,698	48,090	29,772	28,144	
Rupees.	Rupees.	Rupees.	Rupees.	
2,00,798	83,674	1,51,819	1,62,653	
86,81,773	80,79,379	78,28,357	73,72,902	Figures in columns 5, 6, 7 and 8 represent Capital outlay to end of the triennial period.
2,21,154	1,40,966	1,06,651	76,402	
1,93,702	1,35,805	99,943	77,035	
74	220	16	3	
69,161	83,407	77,652	57,536	
1,51,993	57,559	28,999	18,866	
1,24,467	52,178	22,275	19,496	
1.43	0·65	0·28	0·25	
4·20	2·93	3·58	2·71	
3·68	2.82	3·33	2·74	
1·32	1·73	2·61	2·04	

CONSOLIDATED STATEMENT.

MAJOR WORKS—PRODUCTIVE WORKS.

DECCAN AND GUJARA'T TRIENNIAL

Consolidated Statement for

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Acres.	Acres.	Acres.
1. Area irrigated—Kharif	20,415	17,551	19,828
2. Do. —Rabi	5,956	9,351	7,611
3. Do. —Total	26,371	26,902	27,439
	Rupees.	Rupees.	Rupees.
4. Capital Outlay, direct and indirect, during the year...	28,238	14,136	61,082
5. Do. do. to end of year...	1,09,78,486	1,09,92,622	1,10,53,704
6. Revenue—Total (Assessment)	4,17,191	3,54,349	4,10,468
7. Total (Collection)	4,29,853	2,81,808	3,88,180
8. *Deduct*—Refunds	589	1,113	1,744
9. Working Expenses	1,60,947	1,46,163	1,79,374
10. Net Revenue based on Assessment ...	2,56,244	2,08,186	2,31,094
11. Do. on Collection ...	2,68,317	1,34,532	2,07,062
12. Percentage based on Capital	2·44	1·22	1·87
13. Gross Assessed Revenue per acre irrigated...	15·82	13·17	14·96
14. Collection per acre irrigated	16·30	10·47	14·15
15. Working Expenses per acre irrigated ...	6·10	5·43	6·54

REPORT, 1899-1900 TO 1901-1902.

Major Works—Productive Works.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Acres.	Acres.	Acres.	Acres.	
19,264	16,279	15,654	14,901	
7,640	13,817	10,055	11,730	
26,904	30,096	25,709	26,631	
Rupees.	Rupees.	Rupees.	Rupees.	
34,486	26,262	83,929	43,670	
1,10,53,704	1,09,50,247	1,08,71,463	1,06,19,678	The figures in columns 5 to 8 represent capital expenditure to end of triennial period.
3,94,004	3,83,013	3,76,824	3,25,388	
3,66,614	3,59,281	3,64,165	3,30,830	
1,149	1,224	2,805	1,023	
1,62,162	1,83,170	1,38,814	1,43,636	
2,31,842	1,99,843	2,38,010	1,81,752	
2,03,303	1,74,887	2,22,546	1,86,171	
1·84	1·60	2·05	1·75	
14·64	12·73	14·66	12·22	
13·70	11·94	14·16	12·42	
6·03	6·09	5·39	5·39	

CONSOLIDATED STATEMENT.

MINOR WORKS AND NAVIGATION.

WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

DECCAN AND GUJARAT TRIENNIAL

Consolidated Statement for Minor Works and Navigation—

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Acres.	Acres.	Acres.
1. Area irrigated—Kharif	17,313	21,374	26,309
2. Do. —Rabi	21,290	20,332	15,960
3. Do. —Total	38,603	41,706	42,269
	Rupees.	Rupees.	Rupees.
4. Capital Outlay, direct and indirect, during the year.	1,02,467	2,82,198	59,055
5. Do. do. to end of year...	†77,67,614	†80,49,812	81,08,867
6. Revenue—Total (Assessment)	1,35,664	1,14,157	1,38,395
7. Total (Collection)	1,22,464	88,779	1,08,050
8. *Deduct*—Refunds	94	17	64
9. Working Expenses	1,17,815	†2,09,352	1,52,209
10. Net Revenue based on Assessment ...	17,849	—95,195	—13,814
11. Do. on Collection ...	4,555	—1,20,590	—44,223
12. Percentage based on Capital	0·06	1·50	0·55
13. Gross Assessed Revenue per acre irrigated...	3·51	2·74	3·27
14. Collection per acre irrigated	3·17	2·13	2·56
15. Working Expenses per acre irrigated ...	3·05	5·02	3·60

REPORT, 1899-1900 TO 1901-1902.

Works for which Capital and Revenue Accounts are kept.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Acres.	Acres	Acres.	Acres.	
21,666	18,062	13,243	13,262	
19,197	21,084	12,116	11,313	
40,863	39,146	25,359	*25,049	* Inclusive of an average area of 474 acres for which division between kharif and rabi is not forthcoming.
Rupees.	Rupees.	Rupees.	Rupees.	
1,47,907	37,583	79,096	†1,38,749	
81,08,867	76,65,147	75,52,399	73,15,128	The figures in columns 5 to 8 relate to end of triennial period.
1,29,408	1,49,835	1,22,337	98,181	
1,06,432	1,36,731	1,17,498	99,453	
59	48	96	149	
1,59,793	1,00,304	94,392	76,574	† Excluding outlay on the Nilgund Tank, struck off the list of Tanks in charge of the Public Works Department—*Vide* Government Resolution No. W. I.—2625, dated 12th December 1900.
—30,385	49,531	27,945	21,607	
—53,420	36,379	23,010	22,730	
0·66	0·47	0·30	0·31	
3·17	3·83	4·82	3·92	
2·60	3·49	4·63	3·97	
3·91	2·56	3·72	3·06	

CONSOLIDATED STATEMENT.

MINOR WORKS AND NAVIGATION.

WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

DECCAN AND GUJARAT TRIENNIAL

Consolidated statement for Minor Works and Navigation—

Items.	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
1	Number of Works	1,305	1,315	1,296
		Acres.	Acres.	Acres.
2	Area irrigated	131,908	136,410	125,797
	Revenue.	Rs.	Rs.	Rs.
3	Total Revenue	5,64,760	5,67,829	5,26,627
4	Net Revenue	3,46,054	3,58,056	2,58,834
	Working Expenses.			
5	Total Working Expenses	2,18,706	2,09,773	2,67,793

REPORT, 1899-1900 TO 1901-1902.

Works for which only Revenue Accounts are kept.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10.
1,296	1,305	1,308	1,301	The figures in columns 6 to 9 relate to end of the triennial period.
Acres.	Acres.	Acres.	Acres.	
131,372	145,985	145,036	145,782	
Rs.	Rs.	Rs.	Rs.	
5,53,072	5,64,244	5,47,497	5,33,434	
3,20,983	3,44,546	2,81,845	3,45,557	
2,32,089	2,19,698	2,65,652	1,87,877	

DECCAN AND GUJARAT TRIENNIAL REPORT, 1899-1900 TO 1901-1902.

Consolidated Statement for all classes of Irrigation Works.

	During the year.			Average for triennium.			
	1899-1900.	1900-1901.	1901-1902.	1899-1900 to 1901-1902.	1896-1897 to 1898-1899.	1893-1894 to 1895-1896.	1890-1891 to 1892-1893.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Works for which Capital and Revenue Accounts are kept.							
Capital outlay during year	2,69,267	5,45,489	3,34,814	3,83,191	1,47,519	3,14,844	3,45,072
Do. do. to end of year	2,69,64,041	2,75,09,530	2,78,44,344	2,78,44,344	2,66,94,773	2,62,52,219	2,53,07,708
Gross Revenue	7,25,564	5,24,499	7,46,333	6,65,466	6,30,325	5,78,689	5,06,143
Working Expenses ...	3,54,644	4,17,599	4,01,100	3,91,116	3,66,881	3,10,858	2,77,746
Net Revenue	3,70,920	1,06,900	3,45,233	2,74,350	2,63,444	2,67,831	2,28,397
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Area irrigated	1,05,830	1,26,178	1,29,377	1,20,465	1,17,332	80,840	79,824
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Works for which only Revenue Accounts are kept.							
Gross Revenue ...	5,64,760	5,67,829	5,26,627	5,53,072	5,64,244	5,47,497	5,33,434
Working Expenses ...	2,18,706	2,09,773	2,67,793	2,32,089	2,19,698	2,65,652	1,87,877
Net Revenue	3,46,054	3,58,056	2,58,834	3,20,983	3,44,546	2,81,845	3,45,557
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Area irrigated	1,31,908	1,36,410	1,25,797	1,31,372	1,45,985	1,45,036	1,45,782
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Works for which neither Capital nor Revenue Accounts are kept.							
Gross Revenue ...	900	705	3,752	1,785	537	535	771
Working Expenses ...	48,999	1,27,887	1,80,263	1,19,049	62,686	28,032	27,977
Net Revenue	—48,099	—1,27,182	—1,76,511	—1,17,264	—62,149	—27,497	—27,206
Total.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross Revenue... ...	12,91,224	10,93,033	12,76,712	12,20,323	11,95,106	11,26,721	10,40,348
Working Expenses ...	6,22,349	7,55,259	8,49,156	7,42,254	6,49,265	6,04,542	4,93,600
Net Revenue	6,68,875	3,37,774	4,27,556	4,78,069	5,45,841	5,22,179	5,46,748
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Area irrigated	2,37,738	2,62,588	2,55,174	2,51,837	2,63,317	2,25,876	2,25,606

MAJOR WORKS—PROTECTIVE WORKS.

(DECCAN AND GUJARAT.)

DECCAN AND GUJARA'T TRIENNIAL

MAJOR WORKS—

Name of Work—Nira Canal.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	309	1,710	786
2. Do. do. to end of year	56,83,300	56,85,010	56,85,796
3. Interest charges to end of year ...	32,25,289	34,39,543	36,53,843
4. Net Revenue do. ...	3,20,255	4,02,547	5,72,283
5. Total sum at charge do. ...	84,58,944	85,90,044	87,22,792
6. Revenue—Water-rate assessment ...	1,46,952	1,77,868	2,41,844
7. Miscellaneous receipts do. ...	1,587	2,177	1,853
8. Total (assessment)	1,48,539	1,80,045	2,43,697
9. Total (collection)	1,48,200	1,33,866	2,28,058
10. Refunds	26	19	178
11. Working expenses	63,342	51,555	58,144
12. Net Revenue based on assessment ...	85,197	1,28,490	1,85,553
13. Percentage do. on Capital ...	1·50	2·26	3·26
14. Net Revenue based on collection ...	84,832	82,292	1,69,736
15. Percentage do. on Capital ...	1·49	1·45	2·99
16. Gross assessed Revenue per acre irrigated ...	5·46	3·48	4·77
17. Working expenses do. ...	2·33	1·00	1·14
18. Net assessed Revenue do. ...	3·13	2·48	3·63
19. Cost of measurement do. ...	Anna 1 pies 2	pies 9	pies 8
20. Estimated value of crops irrigated ...	20,08,095	39,73,012	39,71,995
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	* 51·47
2. Do. (do. Irrigation) ...	9·84	14·57	13·86
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	227,670	227,670	227,670
4. Area irrigated, Kharif	12,808	21,602	25,216
5. Do. Rabi	14,392	30,126	25,836
6. Do. Total	27,200	51,728	51,052
7. Area applied for (Total)	21,492	54,199	52,217
8. Percentage irrigated of total culturable area under command	11·95	22·73	22·42
9. Lowest supply reached during the year M. C. Ft.	.....	328	523
10. Date on which supply was lowest per Item 9...	.....	June 1900.	May 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	169	155	225
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	188	303	332
12. Supply utilised do. Kharif ...	152	141	219
12. Supply utilised do. Rabi ...	188	303	332
13. Duty per cubic foot per second... Kharif ...	75·79	139·00	112·00
13. Duty per cubic foot per second... Rabi ...	105·50	118·00	113·00

General Remarks.—There is very marked progress on this canal all round; working first triennium mentioned in this report and with no great increase in the discharge, the tion in connection with this work, namely, a Right Bank Canal (all the area now cultivated wasted.

REPORT, 1899-1900 TO 1901-1902.

PROTECTIVE WORKS.

Source of Supply—River Nira and Reservoir at Bhatghar supplied from Yelvandi River and Ghat Catchment.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
935	10,504	1,38,843	1,59,881	
56,85,796	56,82,991	56,51,480	52,34,952	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
36,53,843	30,11,067	23,69,962	17,41,943	
5,72,283	2,35,423	66,887	—12,743	
87,22,792	83,23,180	77,77,879	68,15,240	
1,88,888	1,20,630	87,118	54,217	
1,872	1,616	1,593	1,862	
1,90,760	1,22,246	88,711	56,079	
1,70,041	1,19,068	82,097	55,357	
74	220	16	3	
57,680	62,670	55,538	44,042	
1,33,080	59,576	33,173	12,037	
2·34	1·05	0·60	0·23	
1,12,287	56,178	26,543	11,312	
1·98	0·99	0·48	0·22	
4·40	2·95	3·49	2·63	
1·33	1·51	2·19	2·07	
3·07	1·44	1·30	0·56	
pies 10	pies 11	Anna 1 pies 2	Anna 1 pies 4	
33,17,701	19,07,388	12,29,812	6,33,100	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	* Total rainfall at Lake Whiting.
12·76	17·73	19·14	22·18	
Acres.	Acres.	Acres.	Acres.	
227,670	227,670	227,670	227,670	
19,875	14,379	11,953	9,873	
23,452	27,117	13,489	11,448	
43,327	41,496	25,442	21,341	
42,636	28,709	19,051	16,200	
19·03	18·23	11·18	9·37	
.....	.....	.....	.....	
.....	.....	.....	.....	
183	203	228	176	
274	267	281	232	
171	187	217	131	
274	262	271	216	
108·93	72	50·35	56·66	
112·17	112	48·30	48·65	

expenses have steadily decreased, the area irrigated has been more than doubled since the duty rising from about 50 to 110 acres per cusec. There are two projects under considera- is on the Left Bank of the Nira) and the utilization of the water power which is at present

DECCAN AND GUJARAT TRIENNIAL

MAJOR WORKS—

Name of Work—Mhaswad Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	760	4,044	3,610
2. Do. do. to end of year	20,75,411	20,79,455	20,83,065
3. Interest charges to end of year ...	13,65,946	14,45,492	15,25,156
4. Net Revenue do. ...	—16,221	—5,555	7,103
5. Total sum at charge do. ..	33,91,322	34,61,622	35,34,112
6. Revenue—Water-rate assessment ...	33,116	17,943	22,113
7. Miscellaneous receipts do. ...	5,619	4,294	7,259
8. Total (assessment)	38,735	22,237	29,372
9. Total (collection)	25,756	21,195	24,031
10. Refunds	.....	.....	.....
11. Working expenses	12,540	10,529	11,373
12. Net Revenue based on assessment ...	26,195	11,708	17,999
13. Percentage do. on Capital ...	1·26	0·56	0·86
14. Net Revenue based on collection ...	13,215	10,666	12,658
15. Percentage do. on Capital ...	0·64	0·51	0·61
16. Gross assessed Revenue per acre irrigated ...	2·83	3·81	3·54
17. Working expenses do. ...	0·92	1·80	1·37
18. Net assessed Revenue do. ...	1·91	2·01	2·17
19 Cost of measurement do. ...	10 pies	10 pies	6 pies
20. Estimated value of crops irrigated ...	3,34,393	1,42,211	2,36,738
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (in catchment area)	8·77	11·03	13·55
2. Do. (as affecting Irrigation) ...	8·79	8·53	9·05
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	106,214	106,214	106,214
4. Area irrigated, Kharif	4,242	4,947	5,529
5. Do. Rabi	9,414	895	2,751
6. Do. Total	13,656	5,842	8,280
7. Area applied for (Total)	12,422	4,544	6,157
8. Percentage irrigated of total culturable area under command	12·86	5·50	7·80
9. Lowest supply reached during the year M. C. Ft.	.....	169	68
10. Date on which supply was lowest per Item 9...	.....	May 1900	March 1901
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	54·99	46·43	34·20
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	110·60	64·83	92·09
12. Supply utilised do. Kharif ...	54·99	45·35	32·98
12. Supply utilised do. Rabi ...	110·60	64·83	92·09
13. Duty per cubic foot per second... Kharif ...	77	106·55	161·66
13. Duty per cubic foot per second... Rabi ...	85	50 84	29·87

General Remarks.—This tank is showing signs of improvement both in the area culti- triennium under report have been years of short rainfall to which the improved results may

REPORT, 1899-1900 TO 1901-1902.

PROTECTIVE WORKS.

Source of Supply—Mán River and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
2,805	715	12,482	2,289	
20,83,065	20,74,651	20,72,506	20,35,061	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
15,25,156	12,86,474	10,48,265	8,10,416	
7,103	—29,437	—17,437	—4,634	
35,34,112	33,18,839	30,58,784	27,82,400	
24,391	17,498	15,977	19,665	
5,724	1,222	1,963	658	
30,115	18,720	17,940	20,323	
23,661	16,737	17,846	21,678	
.....	.....	.....	.....	
11,481	20,737	22,114	13,494	
18,634	—2,017	—4,174	6,829	
0·89	0·10	0·20	0·33	
12,180	—4,000	—4,268	8,184	
0·59	0·19	0·21	0·40	
3·25	2·84	4·14	2·99	
1·24	3·14	5·10	1·99	
2·01	0·30	0·96	1·00	
9 pies	Annas 2	Annas 3 pies 4	Annas 3 pies 2	
2,37,781	2,44,645	1,91,145	2,07,850	
Inches.	Inches.	Inches.	Inches.	
11·12	16·32	19·54	19·67	
8·79	13·78	20·26	20·46	
Acres.	Acres.	Acres.	Acres.	
106,214	106,214	106,214	106,214	
4,906	1,940	2,116	3,729	
4,353	4,654	2,214	3,074	
9,259	6,594	4,330	6,803	
7,708	6,413	3,749	5,991	
8·72	6·21	4·08	6·40	
.....	.....	.....	.....	
.....	.....	.....	.....	
45·21	36·73	55·95	42·06	
89·17	68·09	62·80	64·54	
44·44	36·73	55·95	39·02	
89·17	68·09	62·80	59·85	
115·07	44·50	37·88	90·06	
55·24	69·76	36·69	45·50	

vated and a lower rate of working expenses per acre irrigated. The three years of the be entirely due.

MAJOR WORKS—

Name of Work—Shetphal Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	55,345	1,62,401	1,50,145
2. Do. do. to end of year	2,23,333	3,85,734	5,35,879
3. Interest charges to end of year ...	17,002	28,689	46,088
4. Net Revenue do. ...	.....	.....	.....
5. Total sum at charge do. ...	2,32,698	4,02,736	5,64,568
6. Revenue—Water-rate assessment ...	.....	.....	837
7. Miscellaneous receipts do. ...	.....	.....	.....
8. Total (assessment)	.....	.....	837
9. Total (collection)	.....	.....	.....
10. Refunds	.....	.....	.....
11. Working expenses	.....	.....	.....
12. Net Revenue based on assessment ...	.....	.....	837
13. Percentage do. on Capital ...	.....	.....	0·16
14. Net Revenue based on collection ...	.....	.....	.....
15. Percentage do. on Capital ...	.....	.....	.....
16. Gross assessed Revenue per acre irrigated ...	.....	.....	2·48
17. Working expenses do. ...	.....	.....	.....
18. Net assessed Revenue do. ...	.....	.....	2·48
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated ...	.....	.....	1,993
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage)	.....	.....	.....
2. Do. (do. Irrigation) ...	.....	.....	14·06
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	.....	.....	25,000
4. Area irrigated, Kharif	.....	.....	.....
5. Do. Rabi	.....	.....	337
6. Do. Total	.....	.....	337
7. Area applied for (Total)	.....	.....	176
8. Percentage irrigated of total culturable area under command	.....	.....	1·35
9. Lowest supply reached during the year M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9...	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	.....	.....	.....
12. Supply utilised do. Kharif...	.....	.....	.....
12. Supply utilised do. Rabi ...	.....	.....	.....
13. Duty per cubic foot per second... Kharif ...	.....	.....	.....
13. Duty per cubic foot per second... Rabi ...	.....	.....	.....

General Remarks.—This work came into operation in the Rabi season of 1901-02, and

REPORT, 1899-1900 TO 1901-1902.

PROTECTIVE WORKS.

Source of Supply—Nalla, Rainfall and surplus water from Nira Canal.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
1,22,630	55,996	Capital account opened in 1896-97.		
5,35,879	*1,67,988	.....	.....	* Outlay to end of 1898-99.
46,088	†9,360	.....	.....	† To end of 1898-99.
.....	.....	.....	.....	The figures in column 5 relate to end of triennial period.
5,64,568	†1,71,173	.....	.....	
279	.....	.....	.....	
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Inches.	Inches.	Inches.	Inches.	
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Acres.	Acres.	Acres.	Acres.	
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112	.....	.....	.....	
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it is too early yet to judge of its working.

DECCAN AND GUJARAT TRIENNIAL

MAJOR WORKS—

Name of Work.—Chankápur Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	574	13,022	907
2. Do. do. to end of year	95,760	1,08,782	1,09,689
3. Interest charges to end of year ...	49,606	53,511	57,671
4. Net Revenue do. ...	.....	.....	.....
5. Total sum at charge do. ...	1,41,710	1,58,388	1,63,200
6. Revenue—Water-rate assessment ...	.....	.....	.....
7. Miscellaneous receipts do. ...	.....	.....	.....
8. Total (assessment) ...	.....	.....	.....
9. Total (collection) ...	.....	.....	.....
10. Refunds ...	.....	.....	.....
11. Working expenses ...	.....	.....	.....
12. Net Revenue based on assessment ...	.....	.....	.....
13. Percentage do. on Capital ...	.....	.....	.....
14. Net Revenue based on collection ...	.....	.....	.....
15. Percentage do. on Capital ...	.....	.....	.....
16. Gross assessed Revenue per acre irrigated ...	.....	.....	.....
17. Working expenses do. ...	.....	.....	.....
18. Net assessed Revenue do. ...	.....	.....	.....
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated ...	.....	.....	.....
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. irrigation) ...	.....	.....	.....
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	.....	.....	.....
4. Area irrigated, Kharif	.....	.....	.....
5. Do. Rabi	.....	.....	.....
6. Do. Total	.....	.....	.....
7. Area applied for (Total)	.....	.....	.....
8. Percentage irrigated of total culturable area under command	.....	.....	.....
9. Lowest supply reached during the year M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	.....	.....	.....
Rabi ...	.....	.....	.....
12. Supply utilised do. ... Kharif ...	.....	.....	.....
Rabi ...	.....	.....	.....
13. Duty per cubic foot per second . Kharif ...	.....	.....	.....
Rabi ...	.....	.....	.....

General Remarks.—Work suspended, pending

REPORT, 1899-1900 TO 1901-1902.

PROTECTIVE WORKS.

Source of Supply—Girna River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
4,834	8,977	494	543	
1,09,689	95,186	68,255	66,773	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
57,671	45,950	36,486	28,798	
.....	.....	.....	.....	
1,63,200	1,37,518	1,02,159	93,030	
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Inches.	Inches.	Inches.	Inches.	
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Acres.	Acres.	Acres.	Acres.	
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sanction to the revised estimate.

DECCAN AND GUJARAT TRIENNIAL

MAJOR WORKS—

Name of Work.—Maladevi Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	81,574	67,978	59,229
2. Do. do. to end of year	1,40,137	2,08,115	2,67,344
3. Interest charges to end of year ...	24,255	30,911	39,897
4. Net Revenue do. ...	.....	.....	.....
5. Total sum at charge do. ...	1,60,574	2,32,370	2,98,255
6. Revenue—Water-rate assessment ...	.....	.....	.....
7. Miscellaneous receipts do. ...	.....	.....	.....
8. Total (assessment)	.....	.....	.....
9. Total (collection)	.....	.....	.....
10. Refunds	.....	.....	.....
11. Working expenses	.....	.....	.....
12. Net Revenue based on assessment ...	.....	.....	.....
13. Percentage do. on Capital ..	.....	.....	.....
14. Net Revenue based on collection ...	.....	.....	.....
15. Percentage do. on Capital ...	.....	.....	.....
16. Gross assessed Revenue per acre irrigated ...	.....	.....	.....
17. Working expenses do. ...	.....	.....	.....
18. Net assessed Revenue do. ...	.....	.....	.....
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated ...	.....	.....	.....
	Inches.	Inches.	Inches.
II.—Working details.			
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do Irrigation) ...	.....	.....	.....
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	.....	.....	.....
4. Area irrigated, Kharif	.....	.....	.....
5. Do. Rabi	.....	.....	.....
6. Do. Total	.....	.....	.....
7. Area applied for (Total)	.....	.....	.....
8. Percentage irrigated of total culturable area under command	.....	.....	.....
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9 .	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	.....	.....	.....
Rabi ...	.....	.....	.....
12. Supply utilised do. ... Kharif ...	.....	.....	.....
Rabi ...	.....	.....	.....
13. Duty per cubic foot per second . Kharif ...	.....	.....	.....
Rabi ...	.....	.....	.....

General Remarks.—Work incomplete. Revised

REPORT, 1899-1900 TO 1901-1902.

PROTECTIVE WORKS.

Source of Supply.—Pravara River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
69,594	7,482	.....	—10	
2,67,344	58,563	36,116	36,116	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
39,897	20,437	15,297	11,223	
.....	.....	.....	.....	
2,98,255	76,771	50,050	45,990	
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Inches.	Inches.	Inches.	Inches.	
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Acres.	Acres.	Acres.	Acres.	
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project under preparation.

MAJOR WORKS—PRODUCTIVE WORKS.

(DECCAN AND GUJARAT.)

DECCAN AND GUJARAT TRIENNIAL

MAJOR WORKS—

Name of Work.—Hathmati Canal.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3.	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year	.....	.....	.....
2. Do do. to end of year	5,17,838	5,17,838	5,17,838
3. Interest charges to end of year ...	5,31,935	5,51,572	5,71,209
4. Net Revenue do. ...	—38,997	—44,146	—49,979
5. Total sum at charge do. ...	10,67,940	10,88,770	11,13,556
6. Revenue—Water-rate assessment ...	60	950	26
7. Miscellaneous receipts do. ...	808	208	517
8. Total (assessment)	868	1,158	543
9. Total (collection)	5,408	231	561
10. Refunds	.....	.....	.....
11. Working expenses	6,631	5,380	6,394
12. Net Revenue based on assessment ...	—5,763	—4,222	—5,851
13. Percentage do. on Capital ...	1·11	0·82	1·13
14. Net Revenue based on collection ...	—1,223	—5,149	—5,833
15. Percentage do. on Capital ...	0·24	0·99	1·13
16. Gross assessed Revenue per acre irrigated ...	7·89	0·65	4·05
17. Working expenses do. ...	60·28	3·01	47·71
18. Net assessed Revenue do. ...	52·39	2·36	43·66
19. Cost of measurement do. ...	1 anna 2 pies.	Not available.	
20. Estimated value of crops irrigated ...	1,210	13,702	428
	Inches.	Inches.	Inches.
II.—Working details.			
1. Rainfall (as affecting storage) ...	.....	Not available.	
2. Do. (do. Irrigation) ...	3·08	23·95	19·48
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	28,840	28,840	28,840
4. Area irrigated, Kharif	110	1,310	134
5. Do. Rabi	.....	477	.....
6. Do. Total	110	1,787	134
7. Area applied for (Total)	583	1,646	179
8. Percentage irrigated of total culturable area under command	0·38	6·20	0·46
9. Lowest supply reached during the year ... ...M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	30·75	95·75	35·25
Rabi ...	2·37	18·12	.....
12. Supply utilised do. ... Kharif ...	12·50	42·50	16·87
Rabi ...	1·18	9·06	.....
13. Duty per cubic foot per second . Kharif ...	3·76	13·68	3·80
Rabi ...	.....	26·32	.....

General Remarks.—The Canal has a good command, but the land is not very fertile, owing to sandy nature of the soil, the leakage until recently being 50 per cent. of the unsatisfactory financial results. The question of storage is under investigation.

REPORT, 1899-1900 TO 1901-1902.

PRODUCTIVE WORKS.

Source of Supply.—Hathmati River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	—186	36	
5,17,838	5,17,838	5,17,838	5,18,395	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
5,71,209	5,12,298	4,53,387	3,94,476	
—49,979	—37,774	—52,690	—67,113	
11,13,556	10,54,539	10,10,036	9,59,940	
345	11,018	9,582	7,071	
511	1,221	1,221	1,131	
856	12,239	10,803	8,202	
2,067	12,272	10,766	7,630	
.....	.....	.....	.....	
6,135	7,300	5,958	6,239	
—5,279	4,939	4,845	1,963	
1·02	0·95	0·94	0·38	
—4,068	4,972	4,808	1,391	
0·79	0·96	0·93	0·27	
1·26	2·71	2·86	2·67	
9·06	1·62	1·58	2·03	
7·80	1·09	1·28	0·64	
.....	8 pies.	7 pies.	1 anna.	
5,113	2,06,640	1,20,660	86,757	
Inches.	Inches.	Inches.	Inches.	
Not available.		Not available.		
15·50	36·55	41·57	30·02	
Acres.	Acres.	Acres.	Acres.	
28,840	28,840	28,840	28,840	
518	1,589	1,517	1,007	
159	2,934	2,263	2,063	
677	4,523	3,780	3,070	
803	3,710	2,862	2,449	
2·34	15·68	13·11	10·64	
.....	.....	.....	.....	Weir project.
.....	.....	.....	.....	
53·92	68·17	72·50	71·33	
6·83	67·33	69·92	69·33	
23·96	31·16	32·71	26·66	
3·41	34·00	33·66	33·66	
7·08	23·09	21·48	14·42	
8·77	46·26	32·67	30·05	

The limited extent of operations compared with the area anticipated is due to heavy leakage discharge. This, combined with the precarious nature of the supply, accounts for the

DECCAN AND GUJARAT TRIENNIAL

MAJOR WORKS—

Name of Work—Lower Panjhra River Works.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during ...the year.	.....	.....	5
2. Do. do. to end of year	4,68,616	4,68,616	4,68,621
3. Interest charges to end of year ...	5,07,519	5,25,334	5,43,149
4. Net Revenue do. ...	1,79,676	1,89,952	1,99,227
5. Total sum at charge do. ...	7,86,493	7,96,459	8,04,003
6. Revenue—Water-rate assessment* ...	16,476	15,767	14,484
7. Miscellaneous receipts do. ...	548	357	254
8. Total (assessment)	17,024	16,124	14,738
9. Total (collection)*	15,590	15,233	17,472
10. Refunds	.....	.....	.....
11. Working expenses	7,741	4,957	8,197
12. Net Revenue based on assessment ...	9,283	11,167	6,541
13. Percentage do. on Capital ...	1·98	2·38	1·40
14. Net Revenue based on Collection ...	7,849	10,276	9,275
15. Percentage do. on Capital ...	1·67	2·19	1·98
16. Gross assessed Revenue per acre irrigated .	6·93	6·01	6·37
17. Working expenses do. ...	3·15	1·85	3·54
18. Net assessed Revenue do. ..	3·78	4·16	2·83
19. Cost of measurement do. ...	Pies 6	Not available.	Not available
20. Estimated value of crops irrigated ...	17,283	35,223	23,171
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation)† ...	4·20	15·27	17·80
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	12,627	12,627	12,627
4. Area irrigated, Kharif	1,704	1,232	1,636
5. Do. Rabi	754	1,452	678
6. Do. Total	2,458	2,684	2,314
7. Area applied for (Total)	671	836	565
8. Percentage irrigated of total culturable area under command	19·47	21·26	18·33
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	.....	3
10. Date on which supply was lowest per Item 9.	.....	May 1900.	May 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Khrif ...	13·55	.....	7·61
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	21·81	10·21	6·24
12. Supply utilised do. ... Kharif ...	13·55	.....	7·61
12. Supply utilised do. ... Rabi ...	21·81	10·21	6·24
13. Duty per cubic foot per second . Kharif ...	125·76	.....	214·98
13. Duty per cubic foot per second . Rabi ...	34·57	142·21	248·72

General Remarks.—The anticipated area of irrigation has not been approached for the without it. The financial results have not been encouraging. The work was originally work after 1882-83. The area irrigated and consequently the water-rate assessments are

REPORT, 1899-1900 TO 1901-1902.

PRODUCTIVE WORKS.

Source of Supply—Local Streams.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
2	1,382	1,507	1,440	
4,68,621	4,68,616	4,64,469	4,59,949	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
5,43,149	4,89,704	4,36,451	3,83,773	
1,99,227	1,71,827	1,44,189	1,11,612	
8,04,003	7,78,992	7,49,530	7,21,230	
15,576	18,367	17,375	15,412	*Including Irrigation Share of Land Revenue assessment on the "Mámul Bágáyat" with fixed rate under the settlement.
386	583	625	508	
15,962	18,950	18,000	15,920	
16,098	17,978	18,032	16,443	
.....	.....	628	3	
6,965	8,765	6,545	10,246	
8,997	10,185	11,455	5,674	
1·92	2·17	2·47	1·23	
9,133	9,213	10,859	6,194	
1·94	1·97	2·34	1·35	
6·42	5·40	6·24	6·28	
2·80	2·50	2·27	4·04	
3·62	2·90	3·97	2·24	
.....	Pies 5	Pies 8	Anna 1 pies 2	
25,226	81,374	80,231	55,227	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
12·42	22·41	21·51	20·53	† In the catchment area of the Mukti Tank.
Acres.	Acres.	Acres.	Acres.	
12,627	12,627	12,627	12,627	
1,524	1,331	1,614	1,576	
961	2,179	1,270	961	
2,485	3,510	2,884	2,537	
691	1,673	977	770	These figures represent only new irrigation.
19·68	27·80	22·84	20·09	
.....	.....	.....	.....	
.....	.....	.....	.....	
7·05	9·17	14·17	8·29	
		8·32	4·17	
12·75	.....	14·17	8·29	
7·05	9·17	8·32	4·17	
12·75	.....	122·12	295·75	
113·58	206·87	75·26	103·10	
141·83	.....			

main reason that in ordinary years the irrigators do not go in for irrigation if they can do classed as a Productive Public Work but was degraded to the category of ordinary minor fairly steady.

DECCAN AND GUJARAT TRIENNIAL

MAJOR WORKS—

Name of Work—Kádva River Works, comprising Waghad Tank and Palkhed, Ojhar Tambat and Wadali Canals.

Particulars.		1899-1900.	1900-1901.	1901-1902.
1		2	3	4
I.—Financial Results.		Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.		1,922	7,402	14,133
2. Do. do. to end of year...		7,52,217	7,59,619	7,73,752
3. Interest charges to end of year		6,71,501	6,00,493	6,29,876
4. Net Revenue do.		—17,564	—39,466	—60,067
5. Total sum at charge do.		13,06,800	13,48,684	14,13,711
6. Revenue—Water-rate assessment*		12,377	12,759	17,368
7. Miscellaneous receipts do. ...		963	98	289
8. Total (assessment)		13,340	12,857	17,657
9. Total (collection)*...		8,308	5,981	5,386
10. Refunds		.....	.....	.....
11. Working expenses		13,968	27,883	25,987
12. Net Revenue based on assessment		—628	—15,026	—8,330
13. Percentage do. on Capital		0·08	1·98	1·08
14. Net Revenue based on collection		—5,660	—21,902	—20,601
15. Percentage do. on Capital		0·75	2·88	2·66
16. Gross assessed Revenue per acre irrigated		5·29	4·26	4·52
17. Working expenses do.		5·54	9·23	6·65
18. Net assessed Revenue do.		0·25	4·97	2·13
19. Cost of measurement do.		Anna 1 pies 10	Anna 1 pies 3	Anna 1 pies 3
20. Estimated value of crops irrigated		45,612	34,110	41,007
II.—Working details.		Inches.	Inches.	Inches.
1. Rainfall (as affecting storage)		16·19	Not available.	Not available.
2. Do. (do. Irrigation) { Palkhed Canal ...		16·53	26·15	11·81
2. Do. (do. Irrigation) { Ojhar Tambat and Wadali Canals.		4·92	24·02	11·34
		Acres.	Acres.	Acres.
3. Total culturable area under command		36,430	36,430	36,430
4. Area irrigated, Kharif...		2,283	425	2,094
5. Do. Rabi		237	2,595	1,814
6. Do. Total		2,520	3,020	3,908
7. Area applied for (Total)		1,988	2,838	3,586
8. Percentage irrigated of total culturable area under command		6·92	8·29	10·73
9. Lowest supply reached during the year ... M.C.Ft.		.....	10	16
10. Date on which supply was lowest per Item 9 ...		.....	June 1900.	June 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second	Wadali Canal. Kharif...	7·72	5·07	4·71
	Wadali Canal. Rabi ...	5·08	7·08	6·89
12. Supply utilised do. ...	Wadali Canal. Kharif...	5·10	3·80	3·53
	Wadali Canal. Rabi ...	3·35	5·31	5·17
13. Duty per cubic foot per second	Wadali Canal. Kharif...	73·96	27·82	136·73
	Wadali Canal. Rabi ...	37·01	96·61	87·08
11-A. Supply entering the Canal at head, average discharge in cubic feet per second	Ojhar Tambat Canal. Kharif...	2·50	1·91	4·43
	Ojhar Tambat Canal. Rabi ...	4·49	4·86	5·09
12-A. Supply utilised do. ...	Ojhar Tambat Canal. Kharif...	1·90	1·45	3·37
	Ojhar Tambat Canal. Rabi ...	3·40	3·09	3·87
13-A. Duty per cubic foot per second ...	Ojhar Tambat Canal. Kharif...	174·80	59·69	106·99
	Ojhar Tambat Canal. Rabi ...	5·82	89·51	32·61
11-B. Supply entering the Canal at head, average discharge in cubic feet per second	Palkhed Canal. Kharif...	23·05	12·92	23·01
	Palkhed Canal. Rabi ...	17·68	36·33	27·51
12-B. Supply utilised do. ...	Palkhed Canal. Kharif...	17·06	8·01	14·73
	Palkhed Canal. Rabi ...	13·08	22·52	17·61
13-B. Duty per cubic foot per second ...	Palkhed Canal. Kharif...	64·99	23·61	56·06
	Palkhed Canal. Rabi ...	8·94	48·67	46·93

General Remarks.—These canals have not yet been completed, and therefore it will not cattle a greater proportion than one quarter of the culturable area cannot be expected to be increase. As this is, however, accompanied by an increase in working expenses the net and Canals as originally proposed is under consideration.

REPORT, 1899-1900 TO 1901-1902.

PRODUCTIVE WORKS.

Source of Supply—Kádva and Banganga Rivers, and Waghad Tank supplied from Kolyan River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
7,819	8,812	1,141	2,077	
7,73,752	7,50,295	7,23,860	7,20,437	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
6,29,876	5,42,679	4,57,844	3,74,629	
—60,067	—11,904	12,101	12,367	
14,13,711	12,74,197	11,42,260	10,57,020	
14,168	13,300	10,802	9,832	* Including Irrigation share of Land Revenue.
450	346	469	265	
14,618	13,646	11,271	10,097	
6,559	11,248	11,202	9,429	
.....	1	3	.....	
22,613	19,249	11,288	7,729	
—7,995	—5,603	—17	2,368	
1·03	0·75	0·00	0·33	
—16,054	—8,002	—89	1,700	
2·07	1·07	0·01	0·23	
4·64	4·47	4·08	3·78	
7·18	6·30	4·09	2·89	
2·54	1·83	0·01	0·89	
Anna 1 pies 5	Anna 1 pies 4	Anna 1 pies 5	Anna 1 pies 4	
40,243	64,609	1,18,101	1,11,332	
Inches.	Inches.	Inches.	Inches.	
.....	51·29	57·43	Not available.	Rainfall in the tank catchment.
18·16	27·30	27·87	25·76	
13·43	22·42	27·09	24·82	
Acres.	Acres.	Acres.	Acres.	
36,430	36,430	36,430	36,430	
1,600	940	867	958	
1,549	2,115	1,894	1,716	
3,149	3,055	2,761	2,674	
2,804	2,670	2,512	2,337	
8·64	8·39	7·58	7·34	
.....	.....	.....	.....	
.....	.....	.....	.....	
5·83	7·35	6·44	3·02	
6·35	8·61	7·55	4·12	
4·14	5·13	4·55	1·63	
4·61	5·65	4·89	2·26	
79·50	35·75	37·40	39·74	
73·56	63·89	60·20	60·42	
2·95	2·97	3·25	2·07	
4·81	4·66	5·36	2·38	
2·24	2·32	2·49	0·91	
3·65	3·52	3·99	1·53	
113·83	58·89	52·27	50·05	
42·65	74·29	70·81	77·04	
19·66	15·89	15·44	14·75	
27·17	24·91	26·16	17·26	
13·27	11·13	10·61	7·59	
17·74	17·14	15·11	9·71	
48·22	38·76	39·07	48·41	
34·85	62·47	48·68	72·40	

be correct to compare the results achieved with those anticipated. From want of manure and irrigated annually. As it is, the irrigated area and the water-rate assessment show a gradual revenue shows a falling off. The extension of the system by completing the Waghad Tank

DECCAN AND GUJARAT TRIENNIAL

MAJOR WORKS—

Name of Work—Pravara River Works—Lakh Canal.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. do. do. to end of year	3,71,891	3,71,891	3,71,891
3. Interest charges to end of year ...	4,39,992	4,54,090	4,68,188
4. Net Revenue do. ...	—1,88,625	—2,01,661	—2,27,482
5. Total sum at charge do. ...	9,71,753	10,00,508	10,27,642
6. Revenue—Water-rate assessment* ...	1,326	1,026	821
7. Miscellaneous receipts do. ...	117	172	184
8. Total (assessment)	1,443	1,198	1,005
9. Total (collection)*	1,568	701	445
10. Refunds	.....	.....	.....
11. Working expenses...	16,225	13,737	26,266
12. Net Revenue based on assessment ...	—14,782	—12,539	— 25,261
13. Percentage do. on Capital ...	3·98	3·37	6·79
14. Net Revenue based on collection ...	—14,657	—13,036	—25,821
15. Percentage do. on Capital ...	3·94	3·50	6·94
16. Gross assessed Revenue per acre irrigated .	1·37	1·22	1·79
17. Working expenses do. ...	15·41	13·99	46·90
18. Net assessed Revenue do. ...	14·04	12·77	45·11
19. Cost of measurement do. ...	Anna 1	Anna 1	Pies 8
20. Estimated value of crops irrigated ...	7,040	1,848	10,146
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	11·66	11·45	17·94
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	25,536	25,536	25,536
4. Area irrigated, Kharif	477	419	181
5. Do. Rabi	576	563	378
6. Do. Total	1,053	982	560
7. Area applied for (Total)	1,953	1,324	1,162
8. Percentage irrigated of total culturable area under command	4·12	3·85	2·19
9. Lowest supply reached during the year ... ... M.C.Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9.	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second ...	Kharif ... 32·71	37·60	28·15
	Rabi ... 9·60	21·17	15·71
12. Supply utilised do. ...	Kharif ... 26·99	26·44	13·84
	Rabi ... 9·60	19·61	15·71
13. Duty per cubic foot per second .	Kharif ... 14·58	11·14	6·43
	Rabi ... 60·00	26·59	24·12

General Remarks.—The Canal and distributaries were designed on the assumption experience proves they will only irrigate the alluvial lands. The work has been a failure for consideration whether the Canal should continue to be maintained. A portion of the main remedy for improving the results appears to be in the construction of a storage work

REPORT, 1899-1900 TO 1901-1902.

PRODUCTIVE WORKS.

Source of Supply—Pravara River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	67	697	
3,71,891	3,71,891	3,71,891	3,71,690	The figures in columns 5, 6, 7 and 8 relate to triennial period.
4,68,188	4,25,894	3,83,600	3,41,331	
—2,27,482	—1,73,968	—1,05,666	—85,477	
10,27,642	9,46,255	8,39,341	7,82,410	
1,058	2,564*	1,235	1,097	* Including Irrigation Share of Land Revenue except for 1890-91 to 1892-93.
158	362	734	215	
1,216	2,926	1,969	1,312	
905	2,550	1,879	1,305	
.....	.....	.....	.....	
18,743	25,318	9,094	3,203	
—17,527	—22,392	—7,125	—1,891	
4·71	6·02	1·92	0·51	
—17,838	—22,768	—7,215	—1,898	
4·80	6·12	1·94	0·51	
1·40	2·44	5·98	3·58	
21·67	21·08	27·64	8·75	
20·27	18·64	21·66	5·17	
Pies 11	Anna 1 pies 8	Anna 1 pies 8	Annas 2 pies 6	
6,345	1,12,603	16,528	23,733	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
13·68	21·26	20·60	21·33	
Acres.	Acres.	Acres.	Acres.	
25,536	25,536	25,536	25,536	
359	405	115	202	
506	796	214	164	
865	1,201	329	366	
1,480	2,162	532	491	
3·39	4·70	1·29	1·43	
.....	.....	.....	.....	
.....	.....	.....	.....	Weir project.
32·82	43·26	26·64	24·64	
15·49	37·36	22·71	18·47	
22·42	29·78	23·64	18·26	
14·97	28·21	20·37	10·08	
10·72	8·98	4·42	8 34	
36·90	26·30	10·00	9·33	

that the rayats would apply for water for black cotton and rich black soils, whereas also for other reasons. In 1896 the Government of India remarked that it was a question distributaries has still to be constructed before the full command anticipated is gained. The and this is under consideration.

DECCAN AND GUJARÁT TRIENNIAL

MAJOR WORKS—

Name of Work—Mutha Canals.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	26,316	6,734	46,944
2. Do. do. to end of year	66,62,646	66,69,380	67,16,324
3. Interest charges to end of year ...	64,17,020	66,74,187	69,32,324
4. Net Revenue do. ...	27,76,602	29,15,407	31,24,054
5. Total sum at charge do. ...	1,02,79,910	1,03,09,798	1,04,75,104
6. Revenue—Water-rate assessment * ...	1,60,208	1,31,898	1,68,879
7. Miscellaneous receipts do. ...	1,34,001	1,31,285	1,32,270
8. Total (assessment) ...	2,94,209	2,63,183	3,01,149
9. Total (collection) * ...	3,20,970	2,12,925	2,95,968
10. Refunds	547	1,079	846
11. Working expenses	87,035	73,041	86,475
12. Net Revenue based on assessment ...	2,07,174	1,90,142	2,14,674
13. Percentage do. on Capital ...	3·11	2·85	3·20
14. Net Revenue based on collection ...	2,33,388	1,38,805	2,08,647
15. Percentage do. on Capital ...	3·50	2·08	3·11
16. Gross assessed Revenue per acre irrigated.† ..	19·26	17·27	17.46
17. Working expenses do. ...	9·98	8·90	8·26
18. Net assessed Revenue do. † ...	9·28	8·37	9·20
19. Cost of measurement do. ...	Anna 1 pies 3	Anna 1 pies 7	Anna 1 pies 5
20. Estimated value of crops irrigated ...	7,35,657	18,32,792	14,48,143
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (Total)	9·21	23·44	31·85
2. Rainfall (as affecting Irrigation) ...	9·46	30·53	24·98
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	49,800	49,800	49,800
4. Area irrigated, Kharif	8,119	7,575	9,939
5. Do. Rabi	606	629	531
6. Do. Total	8,725	8,204	10,470
7. Area applied for (Total)	7,631	9,045	10,834
8. Percentage irrigated of total culturable area under command	17·52	16·47	21·02
9. Lowest supply reached during the year ... ... M. C. Ft....	...	216	849
10. Date on which supply was lowest per Item 9 ...	...	May 1900.	May 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	168·48	119·07	157
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	131·83	134·29	135
12. Supply utilised do. ... Kharif ...	Not available	Not available.	Not available.
12. Supply utilised do. ... Rabi ...	Do.	Do.	Do.
13. Duty per cubic foot per second... Kharif...	48·90	64·00	63
13. Duty per cubic foot per second... Rabi ...	40·14	35·00	42

General Remarks.—The percentage of Revenue Collections on Capital is improving. from irrigation, (2) the great loss of water by evaporation and (3) the high cost of revenue portion of the system. This Government thereupon approved the working of the canal on a crops is now 50 per cent. of the whole and with the high water rate per acre, the revenue automatic gates on the waste weir which will result in increased revenue. The con- investigation.

REPORT, 1899-1900 TO 1901-1902.

PRODUCTIVE WORKS.

Source of Supply—Mutha River and Rainfall.

Average for the triennium under report.	1896-97 to 1898-1899.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
26,665	16,068	79,100	30,526	
67,16,324	66,36,329	65,88,127	63,50,829	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
69,32,324	61,60,478	53,96,207	46,44,109	
31,24,054	25,43,214	20,77,480	15,44,236	
1,04,75,104	1,01,69,723	98,52,200	93,41,460	
1,53,662	1,34,983	1,51,993	1,19,641	* Including Rs. 42 on account of "Irrigation share of Land Revenue."
1,32,519	1,23,665	1,12,120	1,06,737	
2,86,181	2,58,648	2,64,113	2,26,378	
2,76,621	2,42,276	2,54,758	2,30,538	
824	1,218	2,174	1,018	
82,184	85,813	74,836	84,644	
2,03,997	1,72,835	1,89,277	1,41,734	
3·04	2·61	2·87	2·23	
1,93,613	1,55,245	1,77,748	1,44,876	
2·90	2·35	2·70	2·28	
17·98	15·77	18·09	11·92	† Excluding receipts from "water-power" and "Poona water-supply."
9·00	9·47	8·48	7·92	
8·98	6·30	9·61	4·00	
Anna 1 pies 5	Annas 2 pies 3	Annas 2 pies 5	Anna 1 pies 10	
13,38,864	11,82,064	19,96,584	16,64,269	
Inches.	Inches.	Inches.	Inches.	
21·50	27·29	27·89	25·45	Rainfall at Khadakvasla (Lake Fife).
21·66	31·35	30·26	32·64	
Acres.	Acres.	Acres.	Acres.	
49,800	49,800	49,800	49,800	
8,544	7,256	7,219	6,844	
589	1,809	1,607	3,842	
9,133	9,065	8,826	10,686	
9,170	9,956	9,857	11,640	
18·34	18·20	17·72	21·46	
...	...	...	...	
...	...	...	...	
148·18	150·97	155·82	139·01	
133·71	134·64	147·90	140·47	
Not available.	Not available.	Not available.	Not available.	
Do.	Do.	Do.	Do.	
58·63	48·54	46·39	48·76	
39·05	42·70	10·57	26·20	

In 1893 the Government of India directed attention to (1) the comparatively small returns management, and suggested the advisability of closing some miles of the unprofitable commercial basis, water being allowed for the high rated crops only. The area of perennial on this account is considerable. The storage is now being increased by the addition of struction of two tanks above Lake Fife has also been proposed and the projects are under

MAJOR WORKS—

Name of Work—Ekruk Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	...	...	...
2. Do. do. to end of year	13,40,386	13,40,386	13,40,386
3. Interest charges to end of year ...	14,70,014	15,19,139	15,68,264
4. Net revenue do. ...	—82,544	—66,429	—49,234
5. Total sum at charge do. ...	28,65,024	28,92,944	29,25,954
6. Revenue—Water-rate assessment ...	16,971	9,271	14,940
7. Miscellaneous receipts do. ...	12,856	13,078	16,937
8. Total (assessment)	29,827	22,349	31,877
9. Total (collection)	30,743	24,144	26,933
10. Refunds	36	34	898
11. Working expenses	9,502	7,995	8,840
12. Net Revenue based on assessment ...	20,325	14,354	23,037
13. Percentage do. on Capital ...	1·52	1·07	1·72
14. Net Revenue based on collection ...	21,205	16,115	17,195
15. Percentage do. on Capital ...	1·58	1·20	1·28
16. Gross assessed Revenue per acre irrigated ...	5·97	11·54	6·73
17. Working expenses do. ...	1·90	4·13	1·87
18. Net assessed Revenue do. ...	4·07	7·41	4·86
19. Cost of measurement do. ...	1 Anna 9 pies.	4 Annas 6 pies.	1 Anna 11 pies.
20. Estimated value of crops irrigated ...	2,22,527	45,011	1,64,115
II.—Working Details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	12·50	15·34	28·28
2. Do. (do. Irrigation) ...	11·80	17·71	20·83
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	16,941	16,941	16,941
4. Area irrigated, Kharif	2,353	1,937	2,063
5. Do. Rabi	2,641	...	2,672
6. Do. Total	4,994	1,937	4,735
7. Area applied for (Total)	3,205	1,620	3,369
8. Percentage irrigated of total culturable area under command	29·48	11·43	27·95
9. Lowest supply reached during the year ... ... M. C. F.	...	593	563
10. Date on which supply was lowest per Item 9	...	May 1900.	May 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second ... Kharif ...	31·95	18·97	9·15
11. Supply entering the Canal at head, average discharge in cubic feet per second ... Rabi ...	45·36	8·06	32·36
12. Supply utilised do. ... Kharif...	27·35	9·22	7·15
12. Supply utilised do. ... Rabi ...	39·64	1·48	30·36
13. Duty per cubic foot per second ... Kharif ..	74·00	102·10	225·46
13. Duty per cubic foot per second ... Rabi ...	58·00	...	82·57

General Remarks.—The working of this tank shows a steady improvement due to a slight The tank is handicapped by the small area of culturable area under command and by of the town of Sholápur which has no other source of supply.

REPORT, 1899-1900 TO 1901-1902.

PRODUCTIVE WORKS.

Source of Supply—Adhela River and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
...	...	...	2,327	
13,40,386	13,40,386	13,40,386	13,40,386	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
15,68,264	14,20,889	12,73,514	11,26,141	
—49,234	—1,03,749	—1,06,089	—1,31,261	
29,25,954	28,32,796	26,81,824	25,47,140	
13,728	13,813	13,373	12,691	
14,290	11,600	13,122	12,248	
28,018	25,413	26,495	24,939	
27,273	22,739	26,365	25,482	
323	...	...	...	
8,779	21,959	17,974	18,212	
19,239	3,454	8,521	6,727	
1·44	0·26	0·64	0·50	
18,171	780	8,391	7,270	
1·35	0·06	0·63	0·54	
7·20	6·70	9·06	8·53	
2·25	5·79	6·15	6·23	
4·95	0·91	2·91	2·30	
2 Annas 9 pies.	2 Annas 4 pies	2 Annas 11 pies	2 Annas 8 pies.	
1,43,884	2,23,933	2,39,285	2,04,801	
Inches.	Inches.	Inches.	Inches.	
18·71	24·59	27·71	25·66	
16·78	23·61	25·16	28·55	
Acres.	Acres.	Acres.	Acres.	
16,941	16,941	16,941	16,941	
2,118	2,049	1,916	2,065	
1,771	1,741	1,007	859	* Supply reserved for perennial crops.
3,889	3,790	2,923	2,924	
2,731	2,562	2,497	2,605	
22·95	22·37	17·25	17·26	
...	...	...	...	
...	...	...	...	
20·02	30·59	37·90	33·12	
28·59	37·44	42·51	31·20	
14·57	27.92	34·14	32·23	
23·83	36·23	40·71	30·36	
133·85	68·97	50·88	62·93	
46·86	46·47	25·34	27·13	

increase in the area irrigated, combined with a considerable decrease in working expenses. the fact that a considerable quantity of water has to be reserved to meet the requirements

MAJOR WORKS—

Name of Work—Krishna Canal.

Particulars	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	...	...	...
2. Do. do. to end of year	8,64,892	8,64,892	8,64,892
3. Interest charges to end of year ...	10,44,438	10,77,180	11,09,922
4. Net Revenue do. ..	3,24,085	3,33,508	3,57,708
5. Total sum at charge do. ...	15,79,918	15,85,245	16,08,564
6. Revenue—Water-rate assessment ...	59,232	35,684	42,406
7. Miscellaneous receipts do. ...	1,248	1,796	1,093
8. Total (assessment)	60,480	37,480	43,499
9. Total (collection)	47,266	22,593	41,415
10. Refunds	6	...	...
11. Working expenses	19,845	13,170	17,215
12. Net Revenue based on assessment ...	40,635	24,310	26,284
13. Percentage do. on Capital ...	4·70	2·81	3·04
14. Net Revenue based on collection ...	27,415	9,423	24,200
15. Percentage do. on Capital ...	3·17	1·09	2·80
16. Gross assessed Revenue per acre irrigated ...	9·29	4·52	8·18
17. Working expenses do. ...	3·05	1·59	3·24
18. Net assessed Revenue do. ...	6·24	2·93	4·94
19. Cost of measurement do. ...	Anna 1 pies 6	Anna 1 pies 8	Annas 2 pies 6
20. Estimated value of crops irrigated ...	5,75,485	4,40,349	3,48,396
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (Total)	13·84	23·84	29·13
2. Do. (as affecting Irrigation) ...	13·84	23·84	23·70
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	26,453	26,453	26,453
4. Area irrigated, Kharif	5,369	4,653	3,781
5. Do. Rabi	1,142	3,635	1,537
6. Do. Total	6,511	8,288	5,318
7. Area applied for (Total)	5,985	6,791	5,363
8. Percentage irrigated of total culturable area under command	24·61	31·35	20·10
9. Lowest supply reached during the year ... ... M. C. Ft....	...	...	...
10. Date on which supply was lowest per Item 9 ...	...	...	...
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	47·54	86·41	45·85
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	35·50	75·04	59·71
12. Supply utilised do. ... Kharif...	37·27	34·01	39·82
12. Supply utilised do. ... Rabi ...	34·75	68·33	53·60
13. Duty per cubic foot per second... Kharif...	112·94	127·79	82·46
13. Duty per cubic foot per second... Rabi ...	32·17	48·44	25·74

General Remarks.—The area irrigated shows a gradual increase. This is not, however, actually realized being small the net return is not encouraging. The anticipated irrigable area This is under consideration. The extension of the Canal has also been proposed. This Report the Government of India remarked that the project did not fulfil the conditions of a Minor Works.

If the supply can by any means be increased it is believed it would all be utilised.

REPORT, 1899-1900 TO 1901-1902.

PRODUCTIVE WORKS.

Source of Supply—River Krishna and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
...	...	2,300	6,567	
8,64,892	8,64,892	8,64,892	8,57,992	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
11,09,922	10,11,696	9,13,470	8,15,364	
3,57,708	2,96,670	1,90,328	1,06,196	
16,08,564	15,82,946	15,73,808	15,76,500	
45,774	49,051	41,642	36,183	
1,379	2,140	2,531	2,357	
47,153	51,191	44,173	38,540	
37,091	50,218	41,163	40,003	
2	5	...	2	
16,743	14,766	13,119	13,363	
30,410	36,425	31,054	25,177	
3·52	4·21	3·59	2·93	
20,346	35,447	28,044	26,638	
2·35	4·10	3·24	3·10	
7·03	10·34	10·50	8·81	
2·50	2·98	3·12	3·06	
4·53	7·35	7·38	5·75	
Anna 1 pies 11	Anna 1 pies 8	Annas 3 pies 3	Annas 2 pies 4	
4,54,743	7,17,190	4,81,391	4,00,481	
Inches.	Inches.	Inches.	Inches.	
22·27	29·89	27·10	25·34	Rainfall gauged at Ratre Budruk, 16th mile of the Canal about the centre of the system.
20·46	28·69	24·65	26·22	
Acres.	Acres.	Acres.	Acres.	
26,453	26,453	26,453	26,453	
4,601	2,709	2,406	2,249	
2,105	2,243	1,800	2,125	
6,706	4,952	4,206	4,374	
6,046	4,676	4,043	4,249	
25·35	18·72	15·90	16·53	
...	...	...	...	Weir project.
...	...	...	...	
43·27	61·91	53·92	57·04	
56·75	97·63	85·03	90·02	
37·03	49·54	50·24	44·53	
52·23	78·98	73·01	60·28	
107·73	45·80	44·33	38·33	
35·45	22·89	21·33	24·00	

attended with a corresponding rise in water-rate assessment and owing to the amounts is 12,320 acres and this could be irrigated if the present state of the Canal were improved. Canal is classified as a Productive Public Work, but in passing orders on the Completion Productive Public Work and directed that further Capital outlay should be charged to 43—

MINOR WORKS AND NAVIGATION.

WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

(DECCAN AND GUJARAT.)

DECCAN AND GUJARÁT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Khari Cut.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year...	92,202	1,51,613	38,321
2. Do. do. to end of year...	2,78,367	4,29,980	4,68,301
3. Interest charges to end of year ...	1,22,183	1,35,520	1,52,338
4. Net Revenue do. ...	54,042	46,279	36,917
5. Total sum at charge do. ...	3,37,588	4,98,121	5,57,542
6. Revenue—Water-rate assessment ...	.....	980	.....
7. Miscellaneous receipts do. ...	942	466	1,065
8. Total (assessment) ...	942	1,446	1,065
9. Total (collection)	4,964	579	1,072
10. Refunds	45	.....	.....
11. Working expenses	5,078	8,342	10,434
12. Net Revenue based on assessment ...	—4,136	—6,896	—9,369
13. Percentage do. on Capital ...	1·49	1·60	2·00
14. Net Revenue based on collection ...	—159	—7,763	—9,362
15. Percentage do. on Capital ...	0·06	1·80	2·00
16. Gross assessed Revenue per acre irrigated ...	.....	0·70	.....
17. Working expenses do. ...	.....	4·04	.....
18. Net assessed Revenue do. ...	.....	3·34	.....
19. Cost of measurement do. ...	.....	Not available.	.....
20. Estimated value of crops irrigated ...	.....	10,185	.....
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	4·66	16·24	18·63
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	11,500	11,500	11,500
4. Area irrigated, Kharif	.....	2,060	.....
5. Do. Rabi	.....	2	.....
6. Do. Total	.....	2,062	.....
7. Area applied for (Total)	95	2,923	.....
8. Percentage irrigated of total culturable area under command	.....	17·93	.....
9. Lowest supply reached during the year ... ... M.C.Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second ... ... Kharif.	0·25	20·78	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second ... ... Rabi...	.....	.....	.....
12. Supply utilised do. ... Kharif	0·86	12·22	.....
12. Supply utilised do. ... Rabi...	.....	1·02	.....
13. Duty per cubic foot per second ... Kharif.	.....	99·13	.....
13. Duty per cubic foot per second ... Rabi...	.....	.....	.....

General Remarks.—The average area irrigated is small, due to the precarious nature of which are entitled to water under the terms of an old settlement, are satisfied. An in- in 1899, which takes surplus water from the Hathmati Canal. Extensions of canals and

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Khari River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
94,045	1,439	972	3,692	
4,68,301	1,86,165	1,81,848	1,78,931	
1,52,338	1,13,422	92,725	72,397	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
36,917	54,201	26,243	13,397	
5,57,542	2,51,275	2,47,622	2,30,920	
327	14,048	12,344	5,402	
824	473	508	532	
1,151	14,521	12,852	5,934	
2,205	15,599	9,651	5,765	
15	.....	.....	.....	
7,951	6,280	5,369	4,086	
—6,800	8,241	7,483	1,848	
1·45	4·43	4·11	1·03	
—5,761	9,319	4,282	1,679	
1·23	5·01	2·35	0·94	
1·67	5·29	5·50	4·89	
11·55	2·29	2·30	3·37	
9·88	3·00	3·20	1·52	
.....	1 anna	1 anna 3 pies	1 anna 5 pies	
3,395	75,186	79,846	49,453	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
13·18	33·12	42·21	33·19	
Acres.	Acres.	Acres.	Acres.	
11,500	11,500	11,500	11,500	
687	2,723	2,307	1,192	
1	21	26	21	
688	2,744	2,333	1,213	
1,006	2,899	2,160	1,456	
5·98	23·86	20·28	10·55	
.....	.....	.....	.....	Weir project.
.....	.....	.....	.....	
7·01	23·33	12·87	15·15	
.....	3·10	3·83	0·93	
4·36	20·34	11·98	12·41	
0·34	2·97	3·82	1·24	
33·04	120·54	191·49	83·20	
.....	8·30	14·70	7·67	

the supply which is obtained from the Khari River after the requirements of certain villages, creased supply can now be obtained in favourable years by the Bhojva Channel, excavated provision of a storage reservoir are being made.

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Hartala Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year...	.....	.....	.....
2. Do. do. to end of year.	73,382	73,382	73,382
3. Interest charges to end of year ...	53,104	55,022	56,940
4. Net Revenue do. ...	15,214	15,417	15,994
5. Total sum at charge do. ...	1,09,411	1,11,272	1,12,987
6. Revenue—Water-rate assessment ...	6	102	48
7. Miscellaneous receipts do. ...	573	265	859
8. Total (assessment) ...	579	367	907
9. Total (collection)	262	462	962
10. Refunds	.....	.....	.....
11. Working expenses	205	259	385
12. Net Revenue based on assessment ...	374	108	522
13. Percentage do. on Capital ...	0·51	0·15	0·71
14. Net Revenue based on collection ...	57	203	577
15. Percentage do. on Capital ...	0·08	0·28	0·79
16. Gross assessed Revenue per acre irrigated .	*144·75	6·80	*33·59
17. Working expenses do. ...	51·25	4·80	14·26
18. Net assessed Revenue do. ...	93·50	2·00	19·33
19. Cost of measurement do. ...	†.....	.....	.....
20. Estimated value of crops irrigated ...	30	867	164
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	6·66	23·69	22·20
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	527	527	527
4. Area irrigated, Kharif	1	6	7
5. Do. Rabi	3	48	20
6. Do. Total	4	54	27
7. Area applied for (Total)	5	57	26
8. Percentage irrigated of total culturable area under command	0·76	10·25	5·12
9. Lowest supply reached during the year ... ... M.C.Ft.	.....	.....	Nil.
10. Date on which supply was lowest per Item 9.	.....	.....	January 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second ... ... Kharif.	.....	0·73	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second ... ... Rabi...	.....	0·68	0·26
12. Supply utilised do. ... Kharif.	.....	0·73	.....
12. Supply utilised do. ... Rabi...	.....	0·68	0·26
13. Duty per cubic foot per second ... Kharif.	.....	8·22	.....
13. Duty per cubic foot per second ... Rabi...	.....	70·59	80·77

General Remarks.—A small work which fails in years of low rainfall.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Local Streams.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	.....	
73,382	73,382	73,382	73,382	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
56,940	51,186	45,432	39,678	
15,994	15,157	13,580	12,289	
1,12,987	1,08,159	1,04,081	88,870	
52	155	209	207	
566	653	788	648	
618	808	997	855	
562	826	1,025	848	
.....	.....	.....	118	
283	300	595	573	
325	508	402	282	
0·46	0·69	0·55	0·38	
279	526	430	157	
0·38	0·72	0·59	0·21	
22·07	7·92	11·08	8·46	*The high rate is owing to large miscellaneous receipts.
10·11	2·94	6·61	5·67	
11·96	4·98	4·47	2·79	
.....	.....	4 pies	9 pies	†The measurement was done by the Canal establishment, the irrigated area being small.
354	1,637	1,908	4,687	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
17·52	21·65	27·72	27·30	
Acres.	Acres.	Acres.	Acres.	
527	527	527	527	
5	57	12	2	
23	45	78	99	
28	102	90	101	
29	107	103	107	
5·31	19·35	17·08	19·17	
.....	.....	.....	.....	
.....	.....	.....	.....	
0·24	0·85	0·52	0·29	
0·31	0·83	1·02	0·97	
0·24	0·85	0·52	0·29	
0·31	0·83	1·02	0·97	
2·74	31·03	24·71	8·76	
50·45	52·91	74·80	140·26	

On the area of actual irrigation a protective rate is levied.

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Mhasva Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. Do. do. to end of year	1,38,956	1,38,956	1,38,956
3. Interest charges to end of year ...	1,18,769	1,23,920	1,29,071
4. Net Revenue do. ...	—10,435	—9,963	—10,711
5. Total sum at charge do. ...	2,63,312	2,68,160	2,72,839
6. Revenue—Water-rate assessment ...	1,815	828	778
7. Miscellaneous receipts do. ...	787	480	196
8. Total (assessment)	2,602	1,308	974
9. Total (collection)	1,213	1,718	1,369
10. Refunds	.....	.....	.....
11. Working expenses	910	1,246	2,117
12. Net Revenue based on assessment ...	1,692	62	—1,143
13. Percentage do. on Capital ...	1·22	0·04	0·82
14. Net Revenue based on collection ...	303	472	—748
15. Percentage do. on Capital ...	0·22	0·34	0 54
16. Gross assessed Revenue per acre irrigated ...	2·89	3·46	2·39
17. Working expenses do. ...	1·01	3·30	5·20
18. Net assessed Revenue do. ..	1·88	0·16	2·81
19. Cost of measurement do. ...	8 pies	Not available.	Not available.
20. Estimated value of crops irrigated ...	14,945	5,220	8,898
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	9·98	31·55	23·98
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	4,075	4,075	4,075
4. Area irrigated, Kharif	287	25	141
5. Do. Rabi	612	353	266
6. Do. Total	899	378	407
7. Area applied for (Total)	752	305	290
8. Percentage irrigated of total culturable area under command	22·06	9·28	9·99
9. Lowest supply reached during the year ... ... M.C.Ft.	.....	Nil.	38
10. Date on which supply was lowest per Item 9 .	.....	May 1900	May 1901
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif.	1·28	0·80	0·32
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ..	1·91	0·77	1·63
12. Supply utilised do. ... Kharif.	1·28	0·80	0·32
12. Supply utilised do. ... Rabi...	1·91	0·77	1·63
13. Duty per cubic foot per second ... Kharif.	225·00	31·25	440·62
13. Duty per cubic foot per second ... Rabi...	320·42	458·44	173·62

General Remarks.—A small work

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Local Streams.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	—658	.....	
1,38,956	1,38,956	1,38,956	1,40,930	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
1,29,071	1,13,618	98,165	82,673	
—10,711	—10,738	—10,312	—9,315	
2,72,839	2,57,972	2,41,868	2,27,020	
1,140	747	391	354	
488	479	681	358	
1,628	1,225	1,072	712	
1,433	1,114	1,124	763	
.....	.....	.....	.....	
1,424	1,256	1,456	1,425	
204	—31	—384	—713	
0·15	0·02	0·28	0·51	
9	—142	—332	—662	
0·00	0·10	0·24	0·47	
2·90	3·37	7·82	4·94	
2·54	3·46	10·62	9·89	
0·36	0·09	2·80	4·95	
.....	8 pies	1 anna 1 pie	1 anna 2 pies	
9,688	8,111	2,626	2,720	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
21·84	25·53	26·31	31·75	
Acres.	Acres.	Acres.	Acres.	
4,075	4,075	4,075	4,075	
151	82	19	14	
410	281	118	130	
561	363	137	144	
449	334	128	148	
13·77	8·91	3·36	3·54	
.....	.....	.....	.....	
.....	.....	.....	.....	
0·80	0·86	1·00	0·44	
1·44	1·23	1·48	1·50	
0·80	0·86	1·00	0·44	
1·44	1·23	1·48	1·50	
232·29	84·22	21·68	39·85	
317·49	218·41	76·93	86·95	

dependent on local rainfall.

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Jamda Canals

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year	.....	.....	20
2. Do. do. to end of year.	10,41,069	10,41,069	10,41,089
3. Interest charges to end of year ...	12,79,582	13,19,228	13,58,874
4. Net Revenue do. ...	—1,96,063	—2,20,226	—2 24,600
5. Total sum at charge do. ...	24,54,922	25,16,714	25,80,543
6. Revenue—Water-rate assessment ...	9,440	7,264	3,417
7. Miscellaneous receipts do. ...	297	527	552
8. Total (assessment)	9,737	7,791	3,969
9. Total (collection)	8,878	6,284	7,877
10. Refunds	.....	.....	.....
11. Working expenses	31,024	30,447	12,251
12. Net Revenue based on assessment ...	—21,287	—22,656	—8.282
13. Percentage do. on Capital	2·04	2·18	0 80
14. Net Revenue based on collection ...	—22,146	—24,163	—4,374
15. Percentage do. on Capital ...	2·13	2·32	0·42
16. Gross assessed Revenue per acre irrigated ...	2·16	2·07	2·27
17. Working expenses do. ...	6·87	8·10	7·01
18. Net assessed Revenue do. ...	4·71	6·03	4·74
19. Cost of measurement do. ...	6 pies.	11 pies.	11 pies.
20. Estimated value of crops irrigated ...	52,821	56,198	15,141
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	9·48	16·30	21·88
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	40,185	40,185	40,185
4. Area irrigated, Kharif	2,919	541	857
5. Do. Rabi	1,596	3,216	891
6. Do. Total	4,515	3,757	1,748
7. Area applied for (Total)	4,127	3,229	1,705
8. Percentage irrigated of total culturable area under command	11·24	9·35	4·35
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9.	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	27·70	35·17	22·30
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	11·89	25·53	32·02
12. Supply utilised do. ... Kharif ...	27·70	35·17	22·30
12. Supply utilised do. ... Rabi ...	11·89	25·53	32·02
13. Duty per cubic feet per second... Kharif ...	105·38	15 38	38·43
13. Duty per cubic feet per second... Rabi ...	134·23	125·97	50·16

General Remarks.—The Canals depend entirely on the Girna river for their supply. thus been restored. Storage is required and a tank at Manad has been proposed.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Girna River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
7	33	174	4,036	
10,41,089	10,41,069	10,40,969	10,40,446	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
13,58,874	12,39,936	11,21,000	10,02,214	
—2,24,600	—1,73,917	—1,51,941	—1,56,480	
25,80,543	24,16,102	22,75,821	21,51,500	
6,707	10,195	7,529	3,225	
459	805	3,675	881	
7,166	11,000	11,204	4,106	
7,680	10,327	11,081	4,111	
.....	11	.....	2	
24,574	17,641	9,568	12,389	
—17,408	—6,641	1,636	—8,283	
1·67	0·64	0·15	0·79	
—16,894	—7,325	1,513	—8,280	
1·62	0·70	0·15	0·80	
2·15	3·11	7·99	2·74	
7·36	4·99	6·82	8·28	
5·21	1;88	1·17	5·54	
9 pies	1 anna.	1 anna 7 pies	1 anna 2 pies	
41,387	60,599	40,854	15,708	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
15·89	26·13	22·67	30·40	
Acres.	Acres	Acres.	Acres.	
40,185	40,185	40,185	40,185	
1,439	988	597	399	
1,901	2,549	806	1,097	
3,340	3,537	1,403	1,496	
3,050	3,230	1,362	1,495	
8·31	8·80	3·49	3·72	
.....	.....	.....	.....	Weir project.
.....	.....	.....	.....	
28·39	21·95	39·12	23·12	
23·15	36·89	42·73	51·41	
28·39	21·95	39·12	23·12	
23·15	36·89	42·73	51·41	
53·06	43·28	17·31	15·46	
96·79	74·06	19·89	21·01	

During famine the silt was cleared out by relief labour and the efficiency of the Canals has

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Parsul Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. Do. do. to end of year	2,14,995	2,14,995	2,14,995
3. Interest charges to end of year ...	1,13,731	1,22,052	1,30,373
4. Net Revenue do. ...	4,595	4,874	4,194
5. Total sum at charge do. ...	3,15,640	3,24,131	3,32,173
6. Revenue—Water-rate assessment ...	862	2,170	382
7. Miscellaneous receipts do. ...	20	.....	25
8. Total (assessment)	882	2,170	407
9. Total (collection)	1,000	1,432	670
10. Refunds	.....	.....	.....
11 Working expenses	1,170	1,153	1,345
12. Net Revenue based on assessment ...	—288	1,017	—938
13. Percentage do. on Capital ...	0·13	0·47	0·44
14. Net Revenue based on collection ...	—170	279	—675
15. Percentage do. on Capital ...	0·08	0·13	0·31
16. Gross assessed Revenue per acre irrigated ...	5·13	2·92	1·88
17. Working expenses do. ...	6·80	1·55	6·20
18. Net assessed Revenue do. ...	1·67	1·37	4·32
19. Cost of measurement do. ...	Pies 7	Not available.	Not available.
20. Estimated value of crops irrigated ...	5,683	11,355	1,874
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage)	.....	.....	.....
2. Do. (do. Irrigation)	6·90	10·36	12·40
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	3,197	3,197	3,197
4. Area irrigated, Kharif	172	326	202
5. Do. Rabi	.....	417	15
6. Do. Total	172	743	217
7. Area applied for (Total)	166	816	250
8. Percentage irrigated of total culturable area under command	5·38	23·24	6·79
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	.....	*Nil.*
10. Date on which supply was lowest per Item 9.	.....	.....	February 1901
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	1·95	4·99	1·19
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	1·36	7·77	0·14
12. Supply utilised do. ... Kharif ...	1·95	4·99	1·19
12. Supply utilised do. ... Rabi ...	1·36	7 77	0·14
13. Duty per cubic foot per second ... Kharif ...	88·20	65·33	169·75
13. Duty per cubic foot per second ... Rabi ...	.....	53 67	114·28

General Remarks.—One of the reasons assigned for the deficient area irrigated is that revision settlement. The tank supplied water to bundharás on the Parsul river.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Parsul River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	—586	1,055	3,885	
2,14,995	2,14,995	2,16,754	2,13,589	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
1,30,373	1,05,410	80,286	54,996	
4,194	4,765	2,983	1,998	
3,32,173	3,08,713	2,85,680	2,60,350	
1,138	2,575	1,338	1,090	
15	22	14	7	
1,153	2,597	1,352	1,097	
1,034	1,954	1,464	1,355	
.....	.....	.....	.....	
1,223	1,360	1,136	694	
—70	1,237	216	403	
0·03	0·58	0·10	0·19	
—189	594	328	661	
0·09	0·28	0·15	0·31	
3·06	4·22	4·16	2·85	
3·24	2·21	3·50	1·80	
0·18	2·01	0·66	1·05	
.....	Pies 5	.....*	.....*	*The measurements of crops were made by the canal establishment and there was no separate charge on that account.
6,304	9,024	4,058	4,989	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
9·89	21·87	19·88	21·57	
Acres.	Acres.	Acres.	Acres.	
3,197	3,197	3,197	3,197	
233	153	98	122	
144	463	227	263	
377	616	325	385	
411	545	214	320	
11·79	19·27	10·17	12·04	
.....	.....	.....	.....	
.....	.....	.....	.....	
2·71	0·91	1·20	4·04	
3·09	2·34	1·71	2·57	
2·71	0·91	1·20	4·04	
3·09	2·34	1·71	2·57	
107·73	190·81	96·83	108·28	
55·98	249·09	131·87	142·52	

the villagers are afraid that all irrigated lands would be classed as "Bagayat" at the

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Pravara River Works—Ojhar Canal.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year.	.....	8,575	—7,464
2. Do. do. to end of year	3,30,275	3,38,850	3,31,386
3. Interest charges to end of year ...	3,12,099	3,24,645	3,37,191
4. Net Revenue do. ...	—76,420	—90,970	—1,19,999
5. Total sum at charge do. ...	6,93,382	7,27,369	7,47,001
6. Revenue—Water-rate assessment* ...	6,041	12,005	9,512
7. Miscellaneous receipts do. ...	310	357	396
8. Total (assessment)	6,351	12,362	9,908
9. Total (collection)*	4,351	3,338	5,183
10. Refunds	4	3	27
11. Working expenses	17,374	17,885	34,185
12. Net Revenue based on assessment ...	—11,023	—5,523	—24,277
13. Percentage do. on Capital ...	3·34	1·63	7·33
14. Net Revenue based on collection ...	—13,027	—14,550	—29,029
15. Percentage do. on Capital ...	3·94	4·29	8·76
16. Gross assessed Revenue per acre irrigated ...	1·72	1·67	1·25
17. Working expenses do. ...	4·70	2·42	4·33
18. Net assessed Revenue do. ...	2·98	0·75	3·08
19. Cost of measurement do. ...	Anna 1 pie 1	Pies 11	Pies 6
20. Estimated value of crops irrigated ...	33,898	62,383	84,000
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	12·73	15·94	13·15
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	21,155	21,155	21,155
4. Area irrigated, Kharif	2,249	3,876	5,672
5. Do. Rabi	1,452	3,504	2,233
6. Do. Total	3,701	7,380	7,905
7. Area applied for (Total)	6,869	9,078	11,451
8. Percentage irrigated of total culturable area under command...	17·49	34·89	37·37
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9.	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	38·58	89 57	46·22
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	12·64	41·10	22·71
12. Supply utilised do. Kharif...	35·25	58·46	35·52
12. Supply utilised do. Rabi ...	12·64	41·10	18·40
13. Duty per cubic foot per second... Kharif...	58·01	43·08	122·72
13. Duty per cubic foot per second... Rabi ...	114·87	85·26	98·33

General Remarks.—The canal has a very poor supply from the river at the season when on rainfall and occasional watering from the canal. This will be set right when the storage

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Pravara River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
370	.....	11	1,510	
3,31,386	3,30,275	3,30,275	3,30,242	The figures in columns 5 to 8 relate to end of triennial period.
3,37,191	2,99,714	2,62,559	2,25,406	
—1,19,999	—63,393	—45,928	—12,501	
7,47,001	6,76,279	6,17,612	5,56,620	
9,186	13,362	5,708	5,434	* Including irrigation share of Land Revenue.
354	520	519	404	
9,540	13,882	6,227	5,838	
4,291	11,358	5,459	6,867	
12	19	4	.....	
23,148	17,161	16,597	5,552	
—13,608	—3,279	—10,370	286	
4·11	0·99	3·14	0·09	
—18,869	—5,822	—11,142	1,315	
5·69	1·76	3·37	0·40	
1·50	2·53	3·29	2·54	
3·65	3·13	8·76	2·42	
2·15	0·60	5·47	0·12	
Pies 10	Anna 1 pies 2	Anna 1 pies 8	Annas 2 pies 5	
60,094	4,25,805	81,123	1,24,069	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
13·94	22·18	21·88	24·91	
Acres.	Acres.	Acres.	Acres.	
21,155	21,155	21,155	21,155	
3,933	2,106	507	928	
2,396	3,371	1,387	1,366	
6,329	5,477	1,894	2,294	
9,133	7,852	2,545	2,930	
29·92	25·89	8·95	10·84	
.....	.....	.....	.....	Weir project.
.....	.....	.....	.....	
58·26	37·73	33·56	35·55	
25·48	38·72	35·85	28·87	
43·08	29·94	26·10	26·90	
24·05	35·17	28·24	18·40	
74·60	46·96	15·06	25·72	
99·49	86·44	38·05	48·02	

water is most wanted. The people therefore cultivate only light crops dependent chiefly work under consideration is carried out.

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Bhatodi Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. Do. do. to end of year ...	3,79,707	3,79,707	3,79,707
3. Interest charges to end of year ...	4,13,144	4,27,251	4,41,358
4. Net Revenue do. ...	—2,050	—11,646	—36,814
5. Total sum at charge do. ...	7,77,950	7,94,901	8,18,604
6. Revenue—Water-rate assessment * ...	4,057	4,070	4,959
7. Miscellaneous receipts do. ...	708	414	512
8. Total (assessment) ...	4,765	4,484	5,471
9. Total (collection) * ...	4,859	2,707	2,713
10. Refunds ...	.....	.....	.....
11. Working expenses ...	7,703	12,303	27,881
12. Net Revenue based on assessment ...	—2,938	—7,819	—22,410
13. Percentage do. on Capital ...	0·77	2·06	5·90
14. Net Revenue based on collection ...	—2,844	—9,596	—25,168
15. Percentage do. on Capital ...	0·75	2·53	6·63
16. Gross assessed Revenue per acre irrigated ...	5·47	4·31	5·28
17. Working expenses do. ...	8·85	11·84	26·89
18. Net assessed Revenue do. ...	3·38	7·53	21·61
19. Cost of measurement do. ...	†.....	.....	.....
20. Estimated value of crops irrigated ...	17,571	20,936	19,929
	Inches.	Inches.	Inches.
II.—Working details.			
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	9·32	14·44	16·66
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	13,657	13,657	13,657
4 Area irrigated, Kharif	553	542	525
5. Do. Rabi	317	497	512
6. Do. Total	870	1,039	1,037
7. Area applied for (Total)	1,014	1,400	1,337
8. Percentage irrigated of total culturable area under command	6·37	7·61	7·59
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9.	.....	Tank ran dry on 24th November 1899.	Tank ran dry on 3rd December 1900.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	6·98	6·60	3·60
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	7·68	7·99	8·19
12. Supply utilised do. Kharif ...	6·98	6·60	3·60
12. Supply utilised do. Rabi ...	7·68	7·99	8·19
13. Duty per cubic foot per second... Kharif...	79·23	82·12	145·83
13. Duty per cubic foot per second... Rabi ...	41·28	62·20	62·52

General Remarks.—The tank is much silted and therefore the storage is exhausted

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Mehekri River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	218	
3,79,707	3,79,707	3,79,707	3,79,707	
4,41,358	3,99,037	3,56,716	3,14,395	The figures in columns 5 to 8 relate to end of the triennial period.
—36,814	794	8,395	16,416	
8,18,604	7,59,156	7,10,980	6,64,730	
4,362	5,336	5,988	5,282	
545	402	432	338	
4,907	5,738	6,420	5,620	* Including Irrigation Share of Land Revenue.
3,426	5,460	5,841	5,842	
.....	8	53	7	
15,962	7,986	8,461	3,962	
—11,055	—2,248	—2,041	1,658	
2·91	0·59	0·54	0·44	
—12,536	—2,534	—2,673	1,873	
3·30	0·67	0·70	0·49	
5·00	4·88	4·60	4·05	
16·26	6·79	6·06	2·85	
11·26	1·91	1·46	1·20	
.....	.....	Annas 2 pies 6	Annas 2	† Almost all the area under command is sub-divided into irrigation pôt numbers. The small area that is not sub-divided was measured by the Canal Establishment.
19,479	1,13,177	60,830	64,620	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
13·47	19·30	24·66	28·00	
Acres.	Acres.	Acres.	Acres.	
13,657	13,657	13,657	13,657	
540	414	417	635	
442	763	979	753	
982	1,177	1,396	1,388	
1,250	1,254	1,528	1,295	
7·19	8·62	10·22	10·16	
.....	.....	.....	.....	
.....	.....	.....	.....	
5·73	4·39	4·36	4·93	
7·95	6·71	8·34	9·42	
5·73	4·39	4·36	4·13	
7·95	6·71	8·34	7·11	
102·39	76·22	97·92	134·59	
55·33	128·81	118·68	79·54	

annually by the end of December. Some of the silt was removed during the famine.

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Matoba Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. Do. do. to end of year	2,01,422	2,01,422	2,01,422
3. Interest charges to end of year ...	1,65,087	1,72,613	1,80,139
4. Net Revenue do. ...	99,734	1,01,523	1,08,300
5. Total sum at charge do. ...	2,67,331	2,66,775	2,72,512
6. Revenue—Water-rate assessment ...	12,576	8,550	11,668
7. Miscellaneous receipts do. ...	106	10	694
8. Total (assessment) ...	12,682	8,560	12,362
9. Total (collection) ...	11,260	4,452	9,608
10. Refunds ...	.....	.....	.....
11. Working expenses ...	3,178	2,663	2,831
12. Net Revenue based on assessment ...	9,504	5,897	9,531
13. Percentage do. on Capital ...	4·72	2·93	4·73
14. Net Revenue based on collection ...	8,082	1,789	6,777
15. Percentage do. on Capital ...	4·01	0·89	3·36
16. Gross assessed Revenue per acre irrigated ...	10·47	3·18	4·70
17. Working expenses do. ...	2·62	0·99	1·08
18. Net assessed Revenue do. ...	7·85	2·19	3·62
19. Cost of measurement do. ...	Pies 10	Not available.	Not available.
20. Estimated value of crops irrigated ...	61,241	14,210	69,737
	Inches.	Inches.	Inches.
II.—Working details.			
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	7·12	10·00	11·06
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	7,133	7,133	7,133
4. Area irrrigated, Kharif	1,211	1,404	1,931
5. Do. Rabi	.....	1,288	697
6. Do. Total	1,211	2,692	2,628
7. Area applied for (Total)	1,142	3,253	2,634
8. Percentage irrigated of total culturable area under command	16·98	37·74	36·84
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	Empty	12
10. Date on which supply was lowest per Item 9	.....	February 1900.	June 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	8·79	3·22	7·70
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	7·53	9·14	7·06
12. Supply utilised do. ... Kharif ...	8·79	3·22	7·70
12. Supply utilised do. ... Rabi ...	7·53	9·14	7·06
13. Duty per cubic foot per second Kharif ...	137·77	436·00	251·00
13. Duty per cubic foot per second Rabi ...	65·60	163·00	145·00

General Remarks.—The chief advantage of this work lies in the fact that it stores overflowing. This is situated below the Mutha Canal. The efficiency of the work can be This, however, is dependent on the enlargement of the Mutha Canal.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Nála, rainfall and surplus water from Mutha Right Bank Canal.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	232	1	
2,01,422	2,01,422	2,01,422	2,00,727	The figures in columns 5 to 8 relate to end of triennial period.
1,80,139	1,57,561	1,84,983	1,12,405	
1,08,300	91,652	70,838	51,308	
2,72,512	2,65,498	2,64,243	2,59,410	
10,931	11,998	9,899	9,080	
270	197	87	135	
11,201	12,185	9,986	9,215	
8,440	10,567	9,791	9,847	
.....	.....	.....	7	
2,891	3,629	3,281	2,594	
8,310	8,556	6,705	6,621	
4·13	4·25	3·33	3·30	
5,549	6,938	6,510	7,246	
2·75	3·44	3·23	3·69	
5·15	5·65	8·03	5·80	
1·33	1·68	2·64	1·63	
3·82	3·97	5·39	4·17	
.....	Anna 1 pies 2	Pies 10	Pies 11	
48,396	1,51,877	1,99,939	1,77,684	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
9·39	14·93	15·17	21·48	
Acres.	Acres.	Acres.	Acres.	
7,133	7,133	7,133	7,133	
1,515	1,083	800	997	
662	1,075	443	591	
2,177	2,158	1,243	1,588	
2,343	2,682	1,723	2,076	
30·52	30·25	17·43	22·26	
.....	.....	.....	.....	
.....	.....	.....	.....	
6·57	10·57	9·16	7·54	
7·91	10·42	9·56	8·93	
6·57	10·57	9·16	7·54	
7·91	10·42	9·56	8·93	
274·92	100·84	87·43	137·39	
124·53	126·71	46·76	63·47	

water that would otherwise run to waste during the monsoon when Lake Fife has filled to improved by raising and widening the dam with a view to increasing its storage capacity.

DECCAN AND GUJARÁT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Kasurdi Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. Do. do. to end of year...	45,590	45,590	45,590
3. Interest charges to end of year ...	54,245	55,878	57,511
4. Net Revenue do. ...	—14,539	—13,195	13,386
5. Total sum at charge do. ...	1,12,387	1,14,374	1,14,663
6. Revenue—Water-rate assessment ...	.....	11	365
7. Miscellaneous receipts do. ...	.....	1,682	268
8. Total (assessment) ...	.....	1,693	633
9. Total (collection) ...	177	1,814	322
10. Refunds ...	.....	.....	.....
11. Working expenses ...	531	470	513
12. Net Revenue based on assessment ...	—531	1,223	120
13. Percentage do. on Capital ...	1·16	2·68	0·26
14. Net Revenue based on collection ...	—354	1,344	—191
15. Percentage do. on Capital ...	0·78	2·95	0·42
16. Gross assessed Revenue per acre irrigated ...	.....	*112·86	3·07
17. Working expenses do. ...	.....	31·33	2·49
18. Net assessed Revenue do. ...	.....	81·53	0·58
19. Cost of measurement do. ...	.....	Not available	Not available
20. Estimated value of crops irrigated ...	.....	15	3,972
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage)	.....	.....	.....
2. Do. (do. Irrigation) ...	4·99	10·68	16·05
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	478	478	478
4. Area irrigated, Kharif	.....	15	68
5. Do. Rabi	.....	.....	138
6. Do. Total	.....	15	206
7. Area applied for (Total)	.....	14	169
8. Percentage irrigated of total culturable area under command	.....	3·14	43·10
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	.....	.....	.....
12. Supply utilised do. ... Kharif...	.....	.....	.....
12. Supply utilised do. ... Rabi ...	.....	.....	.....
13. Duty per cubic foot per second... Kharif...	.....	.....	.....
13. Duty per cubic foot per second... Rabi ...	.....	.....	.....

General Remarks.—This tank is dependent on local rainfall and was constructed in 1869 just when it is required. The work is a failure and in some years does not repay its

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Kasurdi nála and rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	.....	
45,590	45,590	45,590	45,590	
57,511	52,612	47,713	42,814	The figures in columns 5 to 8 relate to end of triennial period.
—13,386	—14,185	—10,569	—7,054	
1,14,663	1,09,994	98,519	93,840	
126	219	118	279	
650	139	179	120	
776	358	297	399	
771	245	362	481	
.....	.....	.....	.....	
505	1,451	1,534	339	
271	—1,093	—1,237	60	
0·59	2·40	2·71	0·13	
266	—1,206	—1,172	142	
0·58	2·65	2·57	0·31	
10·48	3·26	6·90	3·09	* Due to large Miscellaneous receipts.
6·82	13·19	35·67	2·62	
3·66	9·93	28·77	0·47	
.....	Pies 7	Pies 3	Pies 11	
1,329	1,458	1,004	2,744	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
10·87	16·09	16·67	19·08	
Acres.	Acres.	Acres.	Acres.	
478	478	478	478	
28	20	14	37	
46	90	29	92	
74	110	43	129	
61	100	56	151	
15·48	23·01	9·00	27·00	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	

as an experiment to test the value of works of this class. The supply is uncertain and fails working expenses.

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Shirsuphal Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. Do. do. to end of year.	2,24,568	2,24,568	2,24,568
3. Interest charges to end of year ...	1,72,911	1,81,399	1,89,887
4. Net Revenue do.	—8,315	—9,422	—9,050
5. Total sum at charge do.	3,97,119	4,05,794	4,15,389
6. Revenue—Water-rate assessment ...	923	1,626	2,625
7. Miscellaneous receipts do. ...	81	87	58
8. Total (assessment) ...	1,004	1,713	2,683
9. Total (collection) ...	3,280	814	2,167
10. Refunds ...	.....	.....	.....
11. Working expenses ...	3,467	1,921	1,795
12. Net Revenue based on assessment ...	—2,463	—208	888
13. Percentage do. on Capital ...	1·10	0·09	0·40
14. Net Revenue based on collection ...	—187	—1,107	372
15. Percentage do. on Capital ...	0·08	0·49	0·17
16. Gross assessed Revenue per acre irrigated ...	2·51	1·60	1·89
17. Working expenses do. ...	8·67	1·79	1·27
18. Net assessed Revenue do. ...	6·16	0·19	0·62
19. Cost of measurement do. ...	Pies 10	Not available	Not available
20. Estimated value of crops irrigated ...	39,050	39,850	83,899
	Inches.	Inches.	Inches.
II.—Working details.			
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	7·83	7·48	10·37
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	2,500	2,500	2,500
4. Area irrigated, Kharif	400	640	768
5. Do. Rabi	.....	434	650
6. Do. Total	400	1,074	1,418
7. Area applied for (Total)	301	765	1,022
8. Percentage irrigated of total culturable area under command	16·00	42·96	56·72
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	Tank ran dry on 22-11-1899.	Tank ran dry on 23-2-1901.
10. Date on which supply was lowest per Item 9 .	.....		
11. Supply entering the canal at head, average discharge in cubic feet per second. Kharif ...	5·73	2·40	2·20
11. Supply entering the canal at head, average discharge in cubic feet per second. Rabi ...	.....	4·78	2·62
12. Supply utilised do. ... Kharif ...	5·73	2·40	2·20
12. Supply utilised do. ... Rabi ...	.....	4·78	2·62
13. Duty per cubic foot per second... Kharif...	69·81	267·00	349
13. Duty per cubic foot per second... Rabi ...	.....	112·00	248

General Remarks—The area irrigated is fairly steady, but the revenue does not cover guarantee water for a very large area of perennial crops which are likely to yield considerable situated derives an important indirect benefit for which the work receives no credit.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Minor Tributary of the Bhima River and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	4,258	3,021	
2,24,568	2,24,568	2,24,568	2,11,793	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
1,89,887	1,64,423	1,38,959	1,13,890	
—9,050	—8,128	—8,069	—4,917	
4,15,389	3,88,559	3,60,940	3,21,370	
1,725	3,154	2,193	3,077	
75	176	163	109	
1,800	3,330	2,356	3,186	
2,087	3,147	2,198	3,354	
.....	1	2	.....	
2,394	3,165	3,247	3,504	
—594	165	—891	—318	
0·26	0·07	0·40	0·15	
—307	—19	—1,051	—150	
0·14	0·00	0·47	0·07	
1·87	2·60	3·91	3·47	
2·48	2·47	5·38	3·81	
0·61	0·13	1·47	0·34	
.....	Pies 7	Pies 10	Pies 11	
54,266	66,687	57,650	58,482	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
8·56	12·41	14·60	20·46	
Acres.	Acres.	Acres.	Acres.	
2,500	2,500	2,500	2,500	
603	390	261	449	
361	891	342	470	
964	1,281	603	919	
696	791	675	1,030	
38·56	51·24	24·12	36·76	
.....	.....	.....	.....	
.....	.....	.....	.....	
3·44	6·05	5·35	4·21	
2·47	6·50	6·08	6·10	
3·44	6·05	5·35	4·21	
2·47	6·50	6·08	6·10	
228·60	64·00	47·96	109·41	
120·00	155·00	47·16	76·93	

the working expenses. Owing to the precarious nature of the rainfall, it is impossible to
revenue. It is stated, however, that the greater portion of the valley in which the tank is

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Bhádalvádi Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. Do. do. to end of year	2,27,422	2,27,422	2,27,422
3. Interest charges to end of year ...	1,69,472	1,77,997	1,86,522
4. Net Revenue do. ...	3,447	3,327	4,889
5. Total sum at charge do. ...	3,85,811	3,93,447	4,02,092
6. Revenue—Water-rate assessment ...	2,528	2,237	1,230
7. Miscellaneous receipts do. ...	321	404	9
8. Total (assessment)	2,849	2,641	1,239
9. Total (collection)	3,533	1,927	3,116
10. Refunds	.....	.....	.....
11. Working expenses	2,644	2,047	1,554
12. Net Revenue based on assessment ...	205	594	—315
13. Percentage do. on Capital ...	0·09	0·26	0·14
14. Net Revenue based on collection ...	889	—120	1,562
15. Percentage do. on Capital ...	0·39	0·05	0·69
16. Gross assessed Revenue per acre irrigated ...	3·45	1·90	1·59
17. Working expenses do. ...	3·20	1·47	1·99
18. Net assessed Revenue do. ...	0·25	0·43	0·40
19. Cost of measurement do. ...	Pies 10.	Not available.	Not available.
20. Estimated value of crops irrigated ...	59,384	40,525	20,700
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	10·21	12·60	14·74
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	2,400	2,400	2,400
4. Area irrigated, Kharif	151	564	693
5. Do. Rabi	675	833	86
6. Do. Total	826	1,397	779
7. Area applied for (Total)	481	1,016	694
8. Percentage irrigated of total culturable area under command	34·42	58·21	32·46
9. Lowest supply reached during the year ... ... M. C. Ft.	.....	Tank became dry on 25th Dec. 1899.	Tank became dry on 14th Dec. 1900.
10. Date on which supply was lowest per Item 9.	.....		
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	3·61	2·50	1·98
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	6·26	5·29	1·44
12. Supply utilised do. Kharif ...	3·61	2·50	1·98
12. Supply utilised do. Rabi ...	6·26	5·29	1·44
13. Duty per cubic foot per second... Kharif ...	41·83	226·00	350·00
13. Duty per cubic foot per second... Rabi ...	118·69	160·00	60·00

General Remarks.—A fair proportion of area under command is annually irrigated. for any large area of perennial crops yielding a larger revenue. It is stated that the greater which the work receives no credit.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Minor Tributary of the Bhima River and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	65	116	
2,27,422	2,27,422	2,27,422	2,27,228	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
1,86,522	1,60,947	1,35,372	1,09,800	
4,889	2,558	869	—60	
4,02,092	3,78,698	3,53,129	3,29,110	
1,998	3,936	2,438	3,422	
245	41	44	138	
2,243	3,977	2,482	3,560	
2,859	3,426	2,239	3,779	
.....	2	4	.....	
2,082	2,861	1,925	2,835	
161	1,116	557	725	
0·07	0·49	0·24	0·32	
777	563	310	944	
0·34	0·25	0·14	0·42	
2·24	2·36	3·92	4·94	
2·08	1·70	3·04	3·93	
0·16	0·66	0·88	1·01	
.....	Pies 6	Pies 10	Pies 11	
40,203	81,096	60,261	88,124	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
12·52	16·00	14·28	21·72	
Acres.	Acres.	Acres.	Acres.	
2,400	2,400	2,400	2,400	
469	469	269	443	
532	1,214	364	278	
1,001	1,683	633	721	
730	1,005	798	768	
41·71	70·13	26·38	30·04	
.....	.....	.....	.....	
.....	.....	.....	.....	
2·70	6·68	4·02	4·52	
4·33	5·91	6·85	4·41	
2·70	6·68	4·02	4·52	
4·33	5·91	6·85	4·41	
205·94	72·00	56·99	98·48	
112·90	229·00	57·35	60·46	

Owing to the precarious nature of the rainfall, however, it is not possible to guarantee water portion of the valley in which the tank is situated derives an important indirect benefit for

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Koregaon Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
Do. do. to end of year.	39,189	39,189	39,189
3. Interest charges to end of year ...	38,563	40,080	41,597
4. Net Revenue do. ...	3,841	3,619	3,194
5. Total sum at charge do. ...	72,199	73,911	75,650
6. Revenue—Water-rate assessment ...	659	85	335
7. Miscellaneous receipts do. ...	13	39	8
8. Total (assessment)	672	124	343
9. Total (collection)	531	523	198
10. Refunds	.....	.....	.....
11. Working expenses	726	745	623
12. Net Revenue based on assessment ...	—54	—621	—280
13. Percentage do. on Capital ...	0·14	1·58	0·71
14. Net Revenue based on collection ...	—195	—222	—425
15. Percentage do. on Capital ...	0·50	0·57	1·08
16. Gross assessed Revenue per acre irrigated ...	2·15	2·88	2·04
17. Working expenses do. ...	2·32	17·32	3·70
18. Net assessed Revenue do. ...	0·17	14·44	1·66
19. Cost of measurement do. ...	Anna 1 pies 9.	Not available.	Not available.
20. Estimated value of crops irrigated ...	2,069	310	375
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	11·40	17·15	17·90
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	Not known.	Not known.	Not known.
4. Area irrigated, Kharif	56	.....	.....
5. Do. Rabi	256	43	168
6. Do. Total	312	43	168
7. Area applied for (Total)	288	43	145
8. Percentage irrigated of total culturable area under command	.....	.....	.....
9. Lowest supply reached during the year, M. C. Ft.	.....	.....	Nil.
10. Date on which supply was lowest per Item 9.	.....	.....	Dec. 1900.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	1·77	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	1·80	0·43	1·50
12. Supply utilized do. ... Kharif...	1·51	.....	.....
12. Supply utilized do. ... Rabi ...	1·54	0·38	1·27
13. Duty per cubic foot per second . Kharif...	32·00	.....	.....
13. Duty per cubic foot per second . Rabi ...	142·00	100·00	112·00

General Remarks.—This is a small tank, but being in an arid part of the Sholápur 1885-1886 and was repaired by this Department in 1886. The catchment area being small

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Nála and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	9	
39,189	39,189	39,189	39,189	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
41,597	37,046	32,495	27,944	
3,194	4,036	4,494	3,825	
75,650	70,561	65,842	61,680	
360	512	1,002	806	
20	36	25	11	
380	548	1,027	817	
417	577	1,012	867	
.....	.....	.....	.....	
698	730	789	915	
—318	—182	238	—98	
0·81	0·46	0·61	0·25	
—281	—153	223	—48	
0·72	0·39	0·57	0·12	
2·18	2·23	2·84	2·58	
3·99	2·97	2·18	2·89	
1·81	0·74	0·66	0·31	
.....	Annas 2 pies 7	Annas 2 pies 11	Annas 5 pie 1	
918	10,115	22,050	18,449	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
15·48	21·68	28·62	33·17	
Acres.	Acres.	Acres.	Acres.	
Not known.	Not known.	Not known.	Not known.	
19	16	77	78	
156	230	285	239	
175	246	362	317	
159	285	364	298	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
0·59	0·69	1·75	0·99	
1·24	2·39	2·54	1·16	
·50	0·66	1·75	0·89	
1·06	2·26	2·54	1·04	
11·00	12·52	56·83	78·93	
118·00	96·46	113·90	213·62	

District is said to do a great deal of good. It was in charge of Revenue Department till no increased irrigation and revenue can be expected.

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Ashti Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	7	.....	—7
2. Do. do. to end of year	8,36,098	8,36,098	8,36,091
3. Interest charges to end of year ...	6,00,431	6,30,713	6,60,995
4. Net Revenue do. ...	—37,451	—79,117	—83,275
5. Total sum at charge do. ...	14,44,580	14,73,980	15,45,921
6. Revenue—Water-rate assessment ...	12,944	2,083	4,748
7. Miscellaneous receipts do. ...	709	749	949
8. Total (assessment) ...	13,653	2,832	5,697
9. Total (collection) ...	5,191	6,117	7,470
10. Refunds ...	.....	.....	.....
11. Working expenses ...	4,309	47,783	11,628
12. Net Revenue based on assessment ...	9,344	—44,951	—5,931
13. Percentage do. on Capital ...	1·12	5·38	0·71
14. Net Revenue based on collection ...	882	—41,666	—4,158
15. Percentage do. on Capital ...	0·11	4·98	0·50
16. Gross assessed Revenue per acre irrigated ...	2·27	3·38	2·99
17. Working expenses do. ...	0·72	56·95	6·10
18. Net assessed Revenue do. ...	1·55	53·57	3·11
19. Cost of measurement do. ...	*.....	.....	.....
20. Estimated value of crops irrigated ...	1,50,077	22,928	70,929
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	12·05	14·47	16·08
2. Do. (do. irrigation) ...	13·90	18·35	15·05
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	16,825	16,825	16,825
4. Area irrigated, Kharif	515	572	424
5. Do. Rabi	5,508	267	1,483
6. Do. Total	6,023	839	1,907
7. Area applied for (Total)	5,772	819	1,883
8. Percentage irrigated of total culturable area under command	35·80	4·99	11·33
9. Lowest supply reached during the year M. C. Ft.	.....	264	110
10. Date on which supply was lowest per Item 9.	.....	May 1900.	April 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	9·05	7·22	1·17
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	27·21	6·71	9·05
12. Supply utilised do. ... Kharif ...	7·68	5·86	0·99
12. Supply utilised do. ... Rabi ...	23·45	5·65	7·69
13. Duty per cubic foot per second... Kharif ...	57·00	79·22	362·40
13. Duty per cubic foot per second... Rabi ...	202·00	39·79	163·87

General Remarks.—The work is not a paying one and there are no prospects of a material poverty and apathy of the irrigators. They generally are content to grow ordinary Kharif resort to irrigation only when these crops begin to suffer seriously.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Ashti Nála and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	1,663	83	5,651	
8,36,091	8,36,091	8,31,103	8,30,869	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
6,60,995	5,70,149	4,79,594	3,89,333	
— 83,275	— 38,333	— 41,748	— 41,428	
15,45,921	14,15,007	13,22,756	12,29,870	
6,592	4,603	4,185	4,023	
802	1,058	445	1,037	
7,394	5,661	4,630	5,060	
6,259	5,286	4,335	5,255	
.....	.....	.....	.....	
21,240	4,148	4,437	6,004	
— 13,846	1,513	193	— 944	
1·66	0·18	0·02	0·11	
— 14,981	1,138	— 102	— 749	
1·79	0·14	0·01	0·09	
2·53	3·00	3·49	3·85	
7·27	2·19	3·34	4·57	
4·74	0·81	0·15	0·72	
.....	.....	.....	.....	
81,311	71,014	61,203	51,292	* The lands under command have been sub-divided into suitable pôt numbers for irrigation purposes.
Inches.	Inches.	Inches.	Inches.	
14·20	23·95	24·58	23·13	Rainfall over the catchment area.
15·77	24·78	24·97	27·74	
Acres.	Acres.	Acres.	Acres.	
16,825	16,825	16,825	16,825	
504	612	614	604	
2,419	1,274	713	709	
2,923	1,886	1,327	1,313	
2,825	1,876	1,334	1,313	
17·37	11·21	7·89	7·80	
.....	.....	.....	.....	
.....	.....	.....	.....	
5·81	8·81	10·01	6·40	
14·32	10·54	10·94	7·84	
4·84	8·38	10·01	5·75	
12·26	10·09	10·94	7·04	
166·21	69·69	61·05	94·84	
135·22	121·10	67·39	88·83	

increase of revenue. The irrigated area is not what it should be owing mainly to the and Rabi crops which require no manure and canal water in years of normal rainfall and

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Revari Canal.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect during the year.	.....	.....	.....
2. Do. do. to end of year	59,811	59,811	59,811
3. Interest charges to end of year ...	72,765	75,036	77,307
4. Net Revenue do. ...	40,402	38.804	39,737
5. Total sum at charge do. ...	94,376	92,174	96,043
6. Revenue—Water-rate assessment ...	2,907	3,024	3,563
7. Miscellaneous receipts do. ...	84	49	100
8. Total (assessment) ...	2,991	3,073	3,663
9. Total (collection) ...	6,539	706	2 582
10. Refunds ...	.....	.....	.....
11. Working expenses ...	2,066	2,304	1,649
12. Net Revenue based on assessment ...	925	769	2,014
13. Percentage do. on Capital ...	1·55	1·29	3·37
14. Net Revenue based on collection ...	4,473	—1,598	933
15. Percentage do. on Capital ...	7·48	2·67	1·56
16. Gross assessed Revenue per acre irrigated ...	18·46	4·29	5·53
17. Working expenses do. ...	12·75	3·21	2·49
18. Net assessed Revenue do. ...	5·71	1·08	3·04
19. Cost of measurement do. ...	As. 15 ps. 3	As. 6 ps. 5	Annas 3
20. Estimated value of crops irrigated ...	27,892	32,488	32,235
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. irrigation) ...	14·14	22·20	21·02
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	3,624	3,624	3,624
4. Area irrigated, Kharif	151	28	57
5 Do. Rabi	11	689	605
6. Do. Total	162	717	662
7. Area applied for (Total)	143	1,044	748
8. Percentage irrigated of total culturable area under command	4·47	19·78	18·27
9. Lowest supply reached during the year M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	2·28	1·81	2·16
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	1·06	4·44	4·02
12. Supply utilised do. ... Kharif ...	2·26	1·81	2·16
12. Supply utilised do. ... Rabi ...	1·06	4·44	4·02
13. Duty per cubic foot per second... Kharif ...	66·23	15·47	26·39
13. Duty per cubic foot per second... Rabi ...	10·38	155·18	150·50

General Remarks.—The cultivators on the Canal appreciate the value of water and grow and as the proposal for a storage reservoir at Sonkeh has been abandoned, it is unlikely

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—River Warna and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	148	538	
59,811	59,811	59,811	59,369	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
77,307	70,494	63,681	56,891	
39,737	35,929	19,054	8,919	
96,043	97,605	1,03,723	1,07,630	
3,165	8,415	6,137	4,672	
78	98	130	52	
3,243	8,513	6,267	4,724	
3,276	7,912	5,762	4,924	
.....	.....	2	.....	
2,007	2,287	2,382	1,866	
1,236	6,226	3,885	2,858	
2·07	10·41	6·50	4·81	
1,269	5,625	3,378	3,058	
2·12	9·40	5·65	5·15	
6·31	5·02	4·57	4·94	
3·90	1·35	1·74	1·95	
2·41	3·67	2·83	2·99	
As. 8 ps. 3	Anna 1 pies 9	As. 2 ps. 6	As. 2 ps. 11	
30,872	91,095	38,339	45,534	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
19·12	31·82	30·13	26·89	
Acres.	Acres.	Acres.	Acres.	
3,624	3,624	3,624	3,624	
79	170	232	175	
435	1,527	1,139	783	
514	1,697	1,371	958	
645	1,584	1,373	882	
14·18	46·83	37·83	26·43	
.....	.....	.....	.....	Weir project.
.....	.....	.....	.....	
2·08	4·17	5·67	4·37	
3·17	12·24	8·93	7·86	
2·08	4·17	5·44	2·43	
3·17	12·24	8·22	5·31	
36·03	41·92	44·00	40·00	
105·35	125·31	131·00	99·00	

perennial crops. The Canal is, however, entirely dependent on the flow of water in the river, that the work will show better results than it has done in the past.

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Upper Mán River Works.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	1 8,510	.....
2. Do. do. to end of year	4,30,696	4,39,207	4,39,207
3. Interest charges to end of year ...	3,64,195	3,80,652	3,97,265
4. Net Revenue do. ...	—14,450	—31,897	—40,164
5. Total sum at charge do. ...	7,86,049	8,17,852	8,51,756
6. Revenue—Water-rate assessment ...	5,598	1,932	2,891
7. Miscellaneous receipts do. ...	194	347	282
8. Total (assessment) ...	5,792	2,279	3,173
9. Total (collection) ...	2,899	1,770	323
10. Refunds ...	31	.....	.....
11. Working expenses ...	9,858	19,217	8,590
12. Net Revenue based on assessment ...	—4,066	—16,938	—5,417
13. Percentage do. on Capital ...	0·94	3·86	1·23
14. Net Revenue based on collection ...	—6,990	—17,447	—8,267
15. Percentage do. on Capital ...	1·62	3·97	1·88
16. Gross assessed Revenue per acre irrigated ...	3·25	2·57	3·60
17. Working expenses do. ...	5·54	21·65	9·74
18. Net assessed Revenue do. ...	2·29	19·08	6·14
19. Cost of measurement do. ...	Anna 1	As. 5 ps. 7	As. 2 ps. 5
20. Estimated value of crops irrigated ...	54,025	10,478	12,677
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. irrigation) ...	11·06	11·99	16·46
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	7,623	7,623	7,623
4. Area irrigated, Kharif	540	761	532
5. Do. Rabi	1,241	127	350
6. Do. Total	1,781	888	882
7. Area applied for (Total)	1,754	1,013	903
8. Percentage irrigated of total culturable area under command	23·36	11·65	11·57
9. Lowest supply reached during the year M. C. Ft.	.....	3	.....
10. Date on which supply was lowest per Item 9 .	.....	May 1900	Dec. 1900
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	0·88	3·67	2·07
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	2·84	1·71	4·17
12. Supply utilised do. ... Kharif ...	0·81	0·67	2·13
12. Supply utilised do. ... Rabi ...	2·73	1·71	4·02
13. Duty per cubic foot per second . Kharif ...	613·64	207·36	257·00
13. Duty per cubic foot per second . Rabi ...	436·97	74·27	83·93

General Remarks.—These works are situated in the driest parts of the district which is of irrigation. The supply, however, is precarious on account of the catchment areas dealt

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Mdn River and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs	Rs.	Rs.	
2,837	82	296	1,067	
4,39,207	4,30,696	4,30,451	4,29,562	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
3,97,265	3,47,893	2,98,987	2,50,094	
—40,164	—7,460	—8,337	—12,968	
8,51,756	7,69,370	7,22,693	6,75,420	
3,474	5,825	6,803	4,392	
274	153	101	128	
3,748	5,978	6,904	4,520	
1,664	4,653	6,394	4,833	
10	.....	.....	.....	
12,555	4,361	4,850	4,735	
—8,807	1,617	2,054	—215	
2·01	0·38	0·48	0·05	
—10,901	292	1,544	98	
2·43	0·07	0·36	0·02	
3·17	3·25	4·69	3·57	
10·60	2·37	3·29	3·74	
7·43	0·88	1·40	0·17	
Annas 3	Anna 1 pies 4	As. 3 ps. 5	As. 2 ps. 5	
25,727	60,041	30,567	30,075	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
13·17	17·36	20·47	19·71	
Acres.	Acres.	Acres.	Acres.	
7,623	7,623	7,623	7,623	
611	715	760	808	
573	1,124	713	459	
1,184	1,839	1,473	1,267	
1,223	1,743	1,403	1,176	
15·53	24·12	19·32	1,662	
.....	.....	.....	.....	
.....	.....	.....	.....	
2·21	2·45	3·71	9·37	
2·91	4·26	6·40	15·10	
2·20	2·03	1·92	5·72	
2·82	3·56	4·16	6·94	
359·33	302	205	88	
198·39	262	119	30	

peculiarly liable to scarcity, and all the water available is used, as the people know the value with being small. The system is a complicated one and is therefore expensive to manage.

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Yerla River Irrigation Works.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	38,506	18,181
2. Do do. to end of year	7,04,892	7,43,398	7,61,579
3. Interest charges to end of year	5,67,836	5,94,990	6,23,179
4. Net Revenue do.	—24,076	—53,943	—55,225
5. Total sum at charge do.	12,72,339	13,35,310	14,10,512
6. Revenue—Water-rate assessment	11,751	5,317	14,557
7. Miscellaneous receipts do. ...	259	372	232
8. Total (assessment)	12,010	5,689	14,789
9. Total (collection)	10,293	8,140	9,589
10. Refunds	.....	.....	.....
11. Working expenses	8,308	38,007	10,871
12. Net Revenue based on assessment	3,702	—32,318	3,918
13. Percentage do. on Capital	0·53	4·35	0·51
14. Net Revenue based on collection	1,985	—29,867	—1,282
15. Percentage do. on Capital	0·28	4·02	0·17
16. Gross assessed Revenue per acre irrigated ...	2·91	1·60	4·64
17. Working expenses do. ...	2·01	10·70	3·41
18. Net assessed Revenue do. ...	0·90	9·10	1·23
19. Cost of measurement do. ...	Annas 2 pies 2	Not available.	Not available.
20. Estimated value of crops irrigated ...	1,60,040	90,283	87,038
	Inches.	Inches.	Inches.
II.—Working details.			
1. Rainfall (as affecting storage)	.....	.....	.....
2. Do. (do. Irrigation)	11·82	20·93	22·11
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	10,680	10,680	10,680
4. Area irrigated, Kharif	218	553	747
5. Do. Rabi	3,908	2,998	2,438
6. Do. Total	4,126	3,551	3,185
7. Area applied for (Total)	3,507	3,340	3,243
8. Percentage irrigated of total culturable area under command	38·63	33·25	29·82
9. Lowest supply reached during the year, M. C. Ft.	.....	3	120
10. Date on which supply was lowest per Item 9.	.....	May 1900.	March 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	1·92	6·12	8·57
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	11·17	22·88	22·09
12. Supply utilised do. ... Kharif...	1·34	6·12	5·22
12. Supply utilised do. ... Rabi ...	5·24	22·88	12·51
13. Duty per cubic foot per second .. Kharif...	113·54	90·36	87·16
13. Duty per cubic foot per second .. Rabi ...	349·87	134·03	110·67

General Remarks.—The works are situated in a region liable to scarcity of rainfall. revenue was steadily increasing. In June 1891 signs of failure were discovered in the having been repaired and strengthened, the waste weir has been restored to the original revenue will increase without any addition to working expenses. With the Upper Mán River

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Yerla River and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
18,896	3,494	10,458	4,094	
7,61,579	7,04,892	6,94,411	6,63,036	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
6,23,179	5,41,386	4,62,720	3,86,129	
—55,225	—26,061	—35,468	—26,074	
14,10,512	12,48,592	11,72,842	10,51,390	
10,542	11,165	8,258	8,103	
287	587	1,044	642	
10,829	11,752	9,302	8,745	
9,341	10,013	8,910	8,731	
.....	2	2	2	
19,062	6,875	12,039	6,326	
—8,233	4,877	—2,737	2,419	
1·08	0·69	0·39	0·36	
—9,721	3,136	—3,131	2,403	
1·28	0·44	0·45	0·36	
2·99	3·37	4·01	4·45	
5·26	1·97	5·19	3·22	
2·27	1·40	1·18	1·23	
.....	Anna 1 pies 5	Annas 2 pie 1.	Annas 2 pies 11	
1,12,454	91,230	49,151	79,471	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
18·29	22·75	27·83	27·29	
Acres.	Acres.	Acres.	Acres.	
10,680	10,680	10,680	10,680	
506	825	448	792	
3'115	2,665	1,869	1,172	
3,621	3,490	2,317	1,964	
3,363	3,191	2,094	1,736	
33·90	32·68	21·69	18·39	
.....	.....	.....	.....	
.....	.....	.....	.....	
5·54	6·12	7·04	19·43	
18·71	13·21	11·62	34·14	
4·23	3·98	2·66	9·62	
13·54	6·99	6·28	14·49	
97·02	135·33	62·33	44·00	
198·09	206·33	137·00	34·67	

The cultivators appreciate the advantage of using Canal water, and up to 1891-92 the dam of the Nehr Tank, and a waste weir was cut to lower the level of water. The dam level, and it is expected that when the extension of the Right Bank Canal is completed, the works this system is also complicated and is somewhat expensive to manage.

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Chikhli Canal.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	.....	.....
2. Do. do. to end of year	57,442	57,442	57,442
3. Interest charges to end of year ...	66,446	68,598	70,750
4. Net Revenue do. ...	—557	—1,692	—3,515
5. Total sum at charge do. ...	1,23,031	1,24,445	1,27,732
6. Revenue—Water-rate assessment ...	320	1,385	1,841
7. Miscellaneous receipts do. ...	67	79	8
8. Total (assessment) ...	387	1,464	1,849
9. Total (collection) ...	1,671	706	734
10. Refunds	.....	10	.....
11. Working expenses	933	1,831	2,557
12. Net Revenue based on assessment ...	—546	—367	—708
13. Percentage do. on Capital	0·95	0·64	1·23
14. Net Revenue based on collection ...	738	—1,135	—1,823
15. Percentage do. on Capital	1·28	1·97	3·17
16. Gross assessed Revenue per acre irrigated ...	8·60	2·73	4·49
17. Working expenses do. ...	20·73	3·41	6·20
18. Net assessed Revenue do. ...	12·13	0·68	1·71
19. Cost of measurement do. ...	Anna 1 pie 1.	Not available.	Anna 1.
20 Estimated value of crops irrigated ...	3,800	32,382	13,794
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage)	.....	.....	.....
2. Do. (do. Irrigation) ...	14·55	18·61	10·61
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	1,478	1,478	1,478
4. Area irrigated, Kharif	37	435	382
5. Do. Rabi	8	102	30
6. Do. Total	45	537	412
7. Area applied for (Total)	187	480	424
8. Percentage irrigated of total culturable area under command	3·04	36·33	27·88
9. Lowest supply reached during the year, M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	0·48	2·25	2·33
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	0·24	1·98	2·26
12. Supply utilised do. ... Kharif...	0·40	1·86	1·76
12. Supply utilised do. ... Rabi ...	0·24	1·75	1·66
13. Duty per cubic foot per second ... Kharif ...	77·08	193·33	163·95
13. Duty per cubic foot per second ... Rabi ...	33·33	51·52	13·27

General Remarks.—The area irrigated is dependent upon the supply of water in the river tion and use all the available supply. No increase of revenue can be expected without Left Bank Canal from which surplus water can be turned into the Chikhli Canal.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—River Nandni and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	.....	
57,442	57,442	57,442	57,442	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
70,750	64,294	57,838	51,382	
—3,515	—1,295	—2,718	—5,880	
1,27,732	1,21,738	1,17,232	1,12,790	
1,182	2,342	1,889	1,571	
51	60	70	91	
1,233	2,402	1,959	1,662	
1,037	1,917	1,976	1,670	
3	.....	.....	.....	
1,774	1,443	922	798	
—541	959	1,037	864	
0·94	1·67	1·81	1·50	
—740	474	1,054	872	
1·29	0·83	1·83	1 52	
3·71	4·46	5·10	4·66	
5·34	2·68	2·40	2·24	
1·63	1·78	2·70	2·42	
Pies 8.	Anna 1 pies 2.	Annas 2 pies 4.	Anna 1 pies 8.	
16,659	33,997	22,981	21,589	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
14·59	18·35	21·21	23·67	
Acres.	Acres.	Acres.	Acres.	
1,478	1,478	1,478	1,478	
285	408	253	296	
47	131	131	61	
332	539	384	357	
364	566	382	399	
22·46	36·46	25·98	24·15	
.....	.....	.....	.....	Weir project.
.....	.....	.....	.....	
1·69	3·15	3·86	4·52	
1·49	5·95	7·72	6·62	
1·34	2·79	2·63	3·02	
1·22	4·54	6·07	3·89	
144·79	131·00	68·33	69·67	
32·71	22·30	19·33	8·33	

and the nature of the rainfall. The cultivators appreciate the advantages of Canal irriga- storage. The Goregaon Tank which was commenced during the last famine will have a

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Maini Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year.	.....	54,828	.....
2. Do. do. to end of year	3,89,649	4,44,477	4,44,477
3. Interest charges to end of year ...	3,90,613	4,06,280	4,22,949
4. Net Revenue do. ...	8,298	7,442	6,131
5. Total sum at charge do. ...	7,59,442	8,26,792	8,43,315
6. Revenue—Water-rate assessment ...	5,616	3,613	5,881
7. Miscellaneous receipts do. ...	400	55	109
8. Total (assessment) ...	6,016	3,668	5,990
9. Total (collection) ...	5,332	2,075	2,823
10. Refunds ...	.....	.....	.....
11. Working expenses ...	3,189	2,931	4,134
12. Net Revenue based on assessment ...	2,827	737	1,856
13. Percentage do. on Capital ...	0·73	0·17	0·42
14. Net Revenue based on collection ...	2,143	—856	—1,311
15. Percentage do. on Capital ...	0·55	0·19	0·29
16. Gross assessed Revenue per acre irrigated ...	3·01	2·59	3·58
17. Working expenses do. ...	1·60	2·07	2·47
18. Net assessed Revenue do. ...	1·41	0·52	1·11
19. Cost of measurement do. ...	Anna 1 pies 8	Annas 2 pies 2	Annas 2 pies 6
20. Estimated value of crops irrigated ...	45,140	40,380	47,415
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	15·24	12·31	11·44
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	4,625	4,625	4,625
4. Area irrigated, Kharif	834	932	1,307
5. Do. Rabi	1,164	483	364
6. Do. Total	1,998	1,415	1,671
7. Area applied for (Total)	1,984	1,537	1,658
8. Percentage irrigated of total culturable area under command	43·20	30·59	36·13
9. Lowest supply reached during the year, M. C. Ft.	.....	Supply exhausted in February 1901.	Supply exhausted on 29th November 1901.
10. Date on which supply was lowest per Item 9	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	2·40	2·01	3·43
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	7·95	4·68	2·93
12. Supply utilised do. Kharif ...	2·40	2·01	3·43
12. Supply utilised do. Rabi ...	7·95	4·68	2·93
13. Duty per cubic foot per second Kharif ...	347·50	463·68	381·05
13. Duty per cubic foot per second Rabi ...	146·42	103·20	124·23

General Remarks.—The work is situated in a tract liable to scarcity when the rainfall people appreciate the benefits to be derived from Canal water, and perennial irrigation is likely

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Wanga Nala and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
18,276	—262	175	8,779	
4,44,477	3,89,649	3,90,434	3,89,910	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
4,22,919	3,75,948	3,31,932	2,87,811	
6,131	6,155	4,025	1,544	
8,43,315	7,43,962	7,06,710	6,68,920	
5,037	4,586	5,450	6,911	
188	102	234	192	
5,225	4,685	5,684	7,103	
3,410	4,245	5,818	6,986	
.....	5	.....	5	
3,418	3,530	4,991	8,860	
1,807	1,115	693	—1,757	
0·41	0·30	0·18	0·46	
—8	710	827	—1,879	
0·00	0·18	0·21	0·48	
3·08	3·22	4·44	4·72	
2·02	2·43	3·90	5·89	
1·06	0·79	0·54	1·17	
Annas 2 pie 1	Anna 1 pies 6	Annas 3 pies 7	Annas 3 pies 6	
44,312	50,613	53,082	46,857	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
13·00	14·18	19·85	22·73	
Acres.	Acres.	Acres.	Acres.	
4,625	4,625	4,625	4,625	
1,024	835	614	1,049	
671	620	665	456	
1,695	1,455	1,279	1,505	
1,726	1,481	1,168	1,568	
36·65	31·46	27·65	32·54	
.....	.....	.....	.....	
.....	.....	.....	.....	
2·61	3·03	3·96	4·73	
5·19	9·14	7·54	10·51	
2·61	2·97	3·96	4·50	
5·19	9·14	6·75	8·20	
397·41	273·67	149·33	241·33	
124·62	66·67	88·67	50·67	

is deficient. The supply is, however, uncertain and silt has accumulated in the basin. The to increase. In the last famine the dam was raised in order to increase the storage.

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR WHICH

Name of Work—Muchkundi Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year...	.....	.....	.....
2. Do. do. to end of year	1,58,707	1,58,707	1,58,707
3. Interest charges to end of year ...	98,877	1,04,486	1,10,095
4. Net Revenue do. ..	—4,159	—3,812	—3,491
5. Total sum at charge do. ...	2,55,536	2,61,743	2,67,005
6. Revenue—Water-rate assessment ...	206	217	454
7. Miscellaneous receipts do. ...	170	510	331
8. Total (assessment) ...	376	727	785
9. Total (collection) ...	263	630	590
10. Refunds ...	.....	.....	.....
11. Working expenses ...	861	283	269
12. Net Revenue based on asssessment ...	—485	444	513
13. Percentage do. on Capital ...	0·31	0·28	0·33
14. Net Revenue based on collection ...	—598	347	321
15. Percentage do. on Capital ...	0·38	0·22	0·20
16. Gross assessed Revenue per acre irrigated ...	5·87	9·44	5·61
17. Working expenses do. ...	13·45	3·67	1·92
18. Net assessed Revenue do. ...	7·58	5·77	3·69
19. Cost of measurement do. ...	Not available.	Not available.	Not available
20. Estimated value of crops irrigated ...	1,087	910	1,466
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage)	.....	.....	.....
2. Do. (do. Irrigation) ...	19·25	17·64	7.80
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	5,417	5,417	5,417
4. Area irrigated, Kharif	17	16	56
5. Do. Rabi	47	61	84
6. Do. Total	64	77	140
7. Area applied for (Total)	74	85	170
8. Percentage irrigated of total culturable area under command...	1·18	1·42	2·58
9. Lowest supply reached during the year M. C. Ft.	.....	109	92
10. Date on which supply was lowest per Item 9.	.....	May 1900.	April 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second ... { Kharif .. / Rabi ...	..... /	..... /	..... / .....
12. Supply utilised do. ... { Kharif ... / Rabi ...	..... /	..... /	..... / .....
13. Duty per cubic foot per second. { Kharif ... / Rabi ...	..... /	..... /	..... / .....

General Remarks.—The country under the Canal is liable to periodical famines and for garden irrigation. It has, however, not proved as advantageous as anticipated chiefly appreciate the value of irrigation for ordinary crops and the uncertainty of hot weather area was found impracticable and abandoned in 1897. A feeder to the tank is much wanted valley to the south of the tank, but no definite conclusion has been arrived at.

REPORT, 1899-1900 TO 1901-1902.

CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Muchkundi Nala and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	1,053	354	
1,58,707	1,58,707	1,58,707	1,55,549	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
1,10,095	93,268	76,441	59,614	
—3,491	—3,561	—3,311	—3,299	
2,67,005	2,50,035	2,33,085	2,12,800	
292	25	77	147	
337	146	339	73	
629	171	416	220	
494	175	411	220	
.....	.....	.....	.....	
471	259	415	410	
158	—88	1	—190	
0·10	0·06	0·00	0·12	
23	—84	—4	—190	
0·01	0·05	0·00	0·12	
6·69	28·50	24·47	3·01	
5·01	43·17	24·41	5·61	
1·68	14·67	0·06	2·60	
.....	.....	.....	.....	
1,154	130	577	Not known.	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
14·90	14·27	17·34	20·74	
Acres.	Acres.	Acres.	Acres.	
5,417	5,417	5,417	5,417	
30	5	14	6	
64	1	3	67	
94	6	17	73	
110	19	29	178	
1·74	0·11	0·31	1·35	
.....	.....	.....	.....	No observations made.
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	

scarcity, and the work was carried out for protecting the land under command as well as owing to the run off having proved less than calculated upon. The villagers do not supply prevents their utilizing it for garden crops. The scheme for enlarging the catchment and for a long time attempts have been made to design a suitable supply channel from the

DECCAN AND GUJARA'T TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR WHICH

Name of Work—Gadikeri Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year...	.....	.....	.....
2. Do. do. to end of year	9,279	9,279	9,279
3. Interest charges to end of year ...	7,135	7,492	7,849
4. Net Revenue do. ...	36,414	35,561	35,595
5. Total sum at charge do. ...	—18,695	—20,000	—18,790
6. Revenue—Water-rate assessment* ...	1,987	1,987	1,987
7. Miscellaneous receipts do. ...	.....	.....	2
8. Total (assessment) ...	1,987	1,987	1,989
9. Total (collection)* ...	1,987	1,987	1,989
10. Refunds ...	.....	.....	.....
11. Working expenses ...	325	2,840	1,955
12. Net Revenue based on assessment ...	1,662	—853	34
13. Percentage do. on Capital ...	17·91	9·19	0·37
14. Net Revenue based on collection ...	1,662	—853	34
15. Percentage do. on Capital ...	17·91	9·19	0·37
16. Gross assessed Revenue per acre irrigated...	5·89	5·89	5·90
17. Working expenses do. ...	0·96	8·42	5·80
18. Net assessed Revenue do. ...	4·93	2·53	0·10
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated ...	.....	.....	.....
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	No rain gauge	No rain gauge	No rain gauge.
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	Not known.	Not known.	Not known.
4. Area irrigated, Kharif	337	337	337
5. Do. Rabi	.....	.....	.....
6. Do. Total	337	337	337
7. Area applied for (Total)	.....	.....	.....
8. Percentage irrigated of total culturable area under command...	.....	.....	.....
9. Lowest supply reached during the year M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9.	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second ... Kharif ...	.....	.....	.....
Rabi	.....	.....	.....
12. Supply utilised do. ... Kharif ...	.....	.....	.....
Rabi ...	.....	.....	.....
13. Duty per cubic foot per second. Kharif ...	.....	.....	.....
Rabi ...	.....	.....	.....

General Remarks.—The management of this tank is in the hands of the Revenue De- on special repairs to the tank and canal.

REPORT, 1899-1900 TO 1901-1902.

CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	.....	
9,279	9,279	9,279	9,279†	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
7,849	6,778	5,707	4,636	
35,595	34,752	29,972	24,809	
—18,790	—17,412	—13,555	—9,510	
1,987	1,987	1,987	1,987	* Irrigation Share of Land Revenue.
1	1	.....	17	† Represents expenditure on improvements only.
1,988	1,988	1,987	2,004	
1,988	1,988	1,987	2,004	
.....	.....	20	.....	
1,707	394	246	233	
281	1,594	1,741	1,771	
3·03	17·18	18·76	19·09	
281	1,594	1,721	1,771	
3·03	17·18	18·55	19·09	
5·90	5·90	5·90	5·94	
5·07	1·17	0·73	0·69	
0·83	4·73	5·17	5·25	
.....	.....	.....	.....	
.....	.....	.....	.....	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
.....	No rain gauge.	26·94	28;78	
Acres.	Acres.	Acres.	Acres.	
.....	Not known.	Not known.	Not known.	
337	337	337	337	
.....	.....	.....	.....	
337	337	337	337	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	

partment. The increase in working expenses is accounted by the expenditure incurred

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR WHICH

Name of Work—Dambal Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year...	.....	.....	.....
2. Do. do. to end of the year	63,980	63,980	63,980
3. Interest charges to end of year ...	54,409	56,843	59,277
4. Net Revenue do. ...	14,793	16,354	16,841
5. Total sum at charge do. ...	1,02,651	1,03,596	1,04,469
6. Revenue—Water-rate assessment* ...	2,233	1,620	1,564
7. Miscellaneous receipts do. ...	347	375	255
8. Total (assessment) ...	2,580	1,995	1,819
9. Total (collection)* ...	2,290	2,376	1,357
10. Refunds ...	.....	.....	.....
11. Working expenses ...	801	815	870
12. Net Revenue based on assessment ...	1,779	1,180	949
13. Percentage do. on Capital ...	2·78	1·84	1·48
14. Net Revenue based on collection ...	1,489	1,561	487
15. Percentage do. on Capital ...	2·33	2·44	0·76
16. Gross assessed Revenue per acre irrigated ...	6·74	5·22	5·23
17. Working expenses do. ...	2·09	2·13	2·50
18. Net assessed Revenue do. ...	4·65	3·09	2·73
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated ...	19,827	8,954	9,188
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	11·07	11·69	19·39
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	2,500	2,500	2,500
4. Area irrigated, Kharif	328	256	251
5. Do. Rabi	55	126	97
6. Do. Total	383	382	348
7. Area applied for (Total)	268	346	400
8. Percentage irrigated of total culturable area under command...	15·32	15·28	13·92
9. Lowest supply reached during the year M. C. Ft.	.....	Tank dry from	Tank dry from
10. Date on which supply was lowest per Item 9.	.....	4-3-1900.	18-2-1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second ... Kharif ...	3·45	1·43	0·90
11. Supply entering the Canal at head, average discharge in cubic feet per second ... Rabi ...	3·67	3·44	3·10
12. Supply utilised do. ... Kharif ...		All	utilized except
12. Supply utilised do. ... Rabi ...			Do.
13. Duty per cubic foot per second... Kharif ...	95	179	274
13. Duty per cubic foot per second... Rabi ...	63	74	78

General Remarks.—The improvement of this tank carried out in 1876-77 has increased Owing to the uncertainty of the tank filling every year there is not much prospect of further sideration and proposals for improvements have been made. The tank is situated in a dry

REPORT, 1899-1900 TO 1901-1902.

CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	345	
63,980	63,980	63,980	63,980	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
59,277	51,975	44,673	37,371	
16,841	13,304	11,024	8,009	
1,04,469	1,00,983	95,856	92,130	
1,806	1,709	1,448	1,116	
326	177	415	381	* Including Irrigation Share of Land Revenue.
2,132	1,886	1,863	1,497	
2,008	1,602	1,864	1,570	
.....	.....	.....	.....	
829	842	859	643	
1,303	1,044	1,004	854	
2·04	1·63	1·57	1·33	
1,179	760	1,005	927	
1·84	1·19	1·57	1·45	
5·75	5·28	7·63	4·56	
2·23	2·36	3·52	1·96	
3·52	2·92	4·11	2·60	
.....	.....	.....	.....	
12,656	8,730	3,869	6,091	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
14·05	17·33	15·98	13·49	
Acres.	Acres.	Acres.	Acres.	
2,500	2,500	2,500	2,500	
278	324	201	249	
93	33	43	79	
371	357	244	328	
338	191	95	262	
14·84	14·28	9·76	13·12	
.....	.....	.....	.....	
.....	.....	.....	.....	
1·93	1·68	1·47	1·81	
3·40	2·83	2·91	2·16	
leakage in canal.				
do.				
183	207	142	156	
72	41	64	45	

the supply of water and rendered possible the cultivation of perennial and garden crops extension of irrigation. A project for increasing the catchment area is under con- zone.

DECCAN AND GUJARÁT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR WHICH CAPITAL

Name of Work—Medleri Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year	.....	.....	.....
2. Do. do. to end of year.	81,392	81,392	81,392
3. Interest charges to end of year ...	60,768	63,902	67,036
4. Net Revenue do. ...	—7,210	—7,152	—7,202
5. Total sum at charge do. ...	1,46,197	1,49,370	1,52,446
6. Revenue—Water-rate assessment ...	762	647	376
7. Miscellaneous receipts do. ...	.....	20	.....
8. Total (assessment) ...	762	667	376
9. Total (collection) ...	664	710	589
10. Refunds ...	.....	.....	20
11. Working expenses	703	652	619
12. Net Revenue based on assessment ...	59	15	—243
13. Percentage do. on Capital ...	0·07	0·02	0·30
14. Net Revenue based on collection ...	—39	58	—50
15 Percentage do. on Capital ...	0·05	0·07	0·06
16. Gross assessed Revenue per acre irrigated.	5·52	6·29	6·96
17. Working expenses do. ...	5·09	6·15	11·46
18. Net assessed Revenue do. ...	0·43	0·14	4·50
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated ...	14,760	8,139	6,740
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	13·47	14·55	17·98
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	830	830	830
4. Area irrigated, Kharif	49	92	29
5. Do. Rabi	89	14	25
6. Do. Total	138	106	54
7. Area applied for (Total)	130	108	79
8. Percentage irrigated of total culturable area under command	16·63	12·77	6·51
9. Lowest supply reached during the year M. C. Ft.	.....	Water below outlet level from 21st March 1900.	.....
10. Date on which supply was lowest per Item 9.	.....		January 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	0·70	0·25	0·40
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	2·20	1·30	1·34
12. Supply utilised do. Kharif ...	All utilized		
12. Supply utilised do. Rabi ...			
13. Duty per cubic foot per second. Kharif...	70	156	72
13. Duty per cubic foot per second. Rabi ...	63	74	37

General Remarks.—The working of this tank is very unsatisfactory and it does not is not much prospect of any extension of irrigation.

REPORT, 1899-1900 TO 1901-1902.

AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Medleri Nála and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	81	
81,392	81,392	81,392	81,392	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
67,036	57,634	48,232	38,330	
—7,202	—7,171	—6,631	—5,776	
1,52,446	1,42,821	1,32,771	1,22,710	
595	660	470	391	
7	1	6	1	
602	661	476	392	
655	588	476	380	
7	.....	.....	.....	
658	768	761	613	
—56	—107	—285	—221	
0·07	0·13	0·35	0·27	
—10	—180	—285	—233	
0·01	0·22	0·35	0·29	
6·08	7·43	3·78	4·31	
6·64	8·63	6·04	6·73	
0·56	1·20	2·26	2·42	
.....	.....	.....	.....	
9,880	8,025	5,866	5,073	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
15·33	24·18	14·32	14·76	
Acres.	Acres.	Acres.	Acres.	
830	830	830	830	
56	75	100	62	
43	14	26	29	
99	89	126	91	
106	95	117	82	
11·93	10·72	15·18	10·96	
.....	.....	.....	.....	
.....	.....	.....	.....	
0·45	0·57	0·49	1·25	
1·61	0·87	1·15	1·07	
except	leakage	in the	Canal.	
99	142	228	49	
58	158	126	44	

pay its working expenses. Owing to the uncertainty of the tank filling every year there

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR WHICH CAPITAL

Name of Work—Madag Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
	Rs.	Rs.	Rs.
I.—Financial Results.			
1. Capital outlay, direct and indirect, during the year ...	.....	.....	.....
2. Do. do. to end of year ...	1,67,598	1,67,598	1,67,598
3. Interest charges to end of year ...	2,13,624	2,20,074	2,26,524
4. Net Revenue do. ...	—6,744	—5,973	—5,408
5. Total sum at charge do. ...	3,82,378	3,87,966	3,93,645
6. Revenue—Water-rate assessment ...	2,886	2,181	2,115
7. Miscellaneous receipts do. ...	105	142	133
8. Total (assessment)	2,991	2,323	2,248
9. Total (collection)	2,358	2,146	2,040
10. Refunds	.....	.....	.....
11. Working expenses	1,495	1,375	1,475
12. Net Revenue based on assessment ...	1,496	948	773
13. Percentage do. on Capital ...	0·89	0·57	0·46
14. Net Revenue based on collection ...	863	771	565
15. Percentage do. on Capital ...	0·51	0·46	0·34
16. Gross assessed Revenue per acre irrigated ...	2·27	2·81	2·52
17. Working expenses do. ...	1·13	1·66	1·65
18. Net assessed Revenue do. ...	1·14	1·15	0·87
19. Cost of measurement do. ...	*.....	.....	.....
20. Estimated value of crops irrigated ...	74,066	31,381	32,855
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	16·99	22·08	24·86
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	1,345	1,345	1,345
4. Area irrigated, Kharif	950	353	371
5. Do. Rabi	364	474	521
6. Do. Total	1,314	827	892
7. Area applied for (Total)	1,280	836	936
8. Percentage irrigated of total culturable area under command	97·70	61·49	66·22
9. Lowest supply reached during the year M. C. Ft.	.....	Not available.	
10. Date on which supply was lowest per Item 9	.....		
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	4·69	5·69	3·75
Rabi ...	8·86	8·15	10 64
12. Supply utilised do. ... Kharif...	All utilized		
Rabi ...			
13. Duty per cubic foot per second . Kharif ...	203	62	99
Rabi ...	57	101	80

General Remarks.—The improvement of this old work has secured an unfailing supply The rates for rice have been increased by Re. 1 since April 1903.

REPORT, 1899-1900 TO 1901-1902.

AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Kumadwati River and Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	.....	
1,67,598	1,67,598	1,67,598	1,67,598	
2,26,524	2,07,174	1,87,824	1,68,474	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
—5,408	—7,607	—8,649	—11,667	
3,93,645	3,76,272	3,58,108	3,42,530	
2,394	1,906	2,135	2,530	
127	169	225	168	
2,521	2,075	2,360	2,698	
2,181	2,069	2,428	2,430	
.....	.....	.....	.....	
1,448	1,722	1,422	1,116	
1,073	353	938	1,582	
0·64	0·21	0·56	0·94	
733	347	1,006	1,314	
0·44	0·21	0·60	0·78	
2·49	2·58	2·78	2·98	
1·43	2·14	1·68	1·23	
1·06	0·44	1·10	1·75	
.....	.....	.....	.....	
46,101	37,399	28,058	33,069	*The lands under command have been subdivided into pot numbers suitable for irrigation purposes.
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
21·31	32·21	22·18	21·43	
Acres.	Acres.	Acres.	Acres.	
1,345	1,345	1,345	1,345	
558	412	494	528	
453	391	355	376	
1,011	803	849	904	
1,017	792	809	738	
75·17	59·70	63·12	67·21	
.....	.....	.....	.....	
.....	.....	.....	.....	
4·71	2·84	4·03	5·77	
9·22	7·16	7·27	9·25	
except	leakage	in	Canal.	
121	145	124	91	
79	105	80	41	

of water during eight months of the year for the irrigation of a considerable area of land.

MINOR WORKS AND NAVIGATION—WORKS FOR WHICH CAPITAL

Name of Work—Asundi Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year ...	.....	.....	.....
2. Do do. to end of year ...	74,995	74,995	74,995
3. Interest charges to end of year ...	41,747	44,177	46,607
4. Net Revenue do. ...	—6,296	—8,014	—9,682
5. Total sum at charge do. ...	1,17,881	1,23,038	1,27,186
6. Revenue—Water-rate assessment* ...	1,495	1,691	1,449
7. Miscellaneous receipts do. ...	57	79	116
8. Total (asessment)	1,552	1,770	1,565
9. Total (collection)*	1,248	1,457	1,660
10. Refunds	.....	.....	.....
11. Working expenses	3,975	3,175	3,328
12. Net Revenue based on assessment ...	—2,423	—1,405	—1,763
13. Percentage do. on Capital ...	3·23	1·87	2·35
14. Net Revenue based on collection ...	—2,727	—1,718	—1,668
15. Percentage do. on Capital ...	3·64	2·29	2·22
16. Gross assessed Revenue per acre irrigated ...	4·33	5·09	4·30
17. Working expenses do. ...	11·10	9·13	9·14
18. Net assessed Revenue do. ...	6·77	4·04	4·84
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated† ...	6,229	8,747	8,097
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	8·07	16·57	14·57
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	1,011	1,011	1,011
4. Area irrigated, Kharif	119	105	104
5. Do. Rabi	239	243	260
6. Do. Total	358	348	364
7. Area applied for (Total)	121	114	195
8. Percentage irrigated of total culturable area under command	35·41	34·42	36·00
9. Lowest supply reached during the year M. C. Ft.	.....	.....	3
10. Date on which supply was lowest per Item 9	.....	.....	March 1901.
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif ...	0·47	0·85	0·93
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	1·96	2·77	2·10
12. Supply utilised do. Kharif ...	All utilized		
12. Supply utilised do. Rabi ...			
13. Duty per cubic foot per second Kharif ...	340	260	209
13. Duty per cubic foot per second Rabi ...	123	110	88

General Remarks.—The improvements to this old tank were carried out with a view to increase; owing to the uncertainty of the tank filling every year there is no prospect of any extension

REPORT, 1899-1900 TO 1901-1902.

AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	REMARKS.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	4,179	.....	
74,995	74,995	74,995	62,459	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
46,607	39,317	32,027	24,737	
—9,682	—3,569	914	99	
1,27,186	1,11,984	1,03,949	84,340	
1,545	1,253	1,081	823	* Including irrigation share of Land Revenue.
84	18	22	23	
1,629	1,271	1,103	846	
1,455	1,131	1,160	765	
.....	.....	.....	.....	
3,493	2,626	888	847	
—1,864	—1,355	215	—1	
2·49	1·81	0·29	0·00	
—2,038	—1,495	272	—82	
2·72	1·99	0·36	0·13	
4·56	3·95	3·55	3·88	
9·78	8·16	2·86	3·88	
5·22	4·21	0·69	0·00	
.....	.....	.....	.....	
7,691	7,643	6,423	2,618	† Value of new irrigation only.
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
13·07	24·44	17·96	17·97	
Acres.	Acres.	Acres.	Acres.	
1,011	1,011	1,011	1,011	
109	88	89	56	
248	234	221	162	
357	322	310	218	
143	109	108	91	The areas represent only new irrigation.
35·31	31·85	30·66	21·56	
.....	.....	.....	.....	
.....	.....	.....	.....	
0·75	0·65	1·22	1·79	
2·31	1·52	1·26	1·73	
except	leakage	in Canal.		
270	204	126	35	
107	153	163	46	

prove the supply and were expected to be remu nerative. This has not, however, been the of irrigation.

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATON—WORKS FOR WHICH

Name of Work—Mávinkop Tank.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year...	.....	2,464	175
2. Do. do. to end of year.	30,847	33,311	33.486
3. Interest charges to end of year ...	23,482	24,681	25,828
4. Net Revenue do. ...	19,032	20,891	22,742
5. Total sum at charge do. ...	36,037	37,761	37,226
6. Revenue—Water-rate assessment * ...	2,057	2,057	2,057
7. Miscellaneous receipts do. ...	1	9	.....
8. Total (assessment) ...	2,058	2,066	2,057
9. Total (collection) † ...	2,058	2,066	2,057
10. Refunds ...	.....	.....	.....
11. Working expenses ...	206	207	206
12. Net Revenue based on assessment ...	1,852	1,859	1,851
13. Percentage do. on Capital ...	6·00	5·58	5·53
14. Net Revenue based on collection ...	1,852	1,859	1,851
15. Percentage do. on Capital ...	6·00	5·58	5·53
16. Gross assessed Revenue per acre irrigated ...	3·81	3·83	3·81
17. Working expenses do. ...	0·38	0·39	0·38
18. Net assessed Revenue do. ...	3·43	3·44	3·43
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated ...	.....	.....	.....
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	No rain-gauge	No rain gauge	No rain gauge
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	755	755	755
4. Area irrigated, Kharif	540	540	540
5. Do. Rabi	.....	.....	.....
6. Do. Total	540	540	540
7. Area applied for (Total)	.....	.....	.....
8. Percentage irrigated of total culturable area under command	71·52	71·52	71·52
9 Lowest supply reached during the year M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9 .	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. { Kharif ...	.....	.....	.....
{ Rabi ...	.....	.....	.....
12. Supply utilised do. ... { Kharif ...	.....	.....	.....
{ Rabi ...	.....	.....	.....
13. Duty per cubic foot per second... { Kharif ...	.....	.....	.....
{ Rabi ...	.....	.....	.....

General Remarks.—This tank is managed by the cultivators under the control of the tank cultivates mainly rice lands in Kánara and is situated in a zone of heavy rainfall the area irrigated are likely owing to small improvements carried out lately (1900-1901).

REPORT, 1899-1900 TO 1901-1902.

CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Rainfall.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
880	.....	.....	.....	
33,486	30,847	30,847	30,847	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
25,828	22,378	19,066	15,754	
22,742	17,180	11,634	8,266	
37,226	36,797	38,852	38,060	
2,057	2,057	1,242	876	* Irrigation share = $\frac{1}{3}$rds of Consolidated Assessment.
3	3	5	4	
2,060	2,060	1,247	880	
2,060	2,060	1,247	880	† Including do.
.....	.....	.....	.....	
206	211	124	89	
1,854	1,849	1,123	791	
5·54	6·00	3·64	2·56	
1,854	1,849	1,123	791	
5·54	6·00	3·64	2·56	
3·81	3·81	2·45	1·86	
0·38	0·39	0·24	0·19	
3·43	3·42	2·21	1·67	
.....	.....	.....	.....	All revenue is consolidated and a fixed charge.
.....	.....	.....	.....	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
.....	.....	.....	.....	
Acres.	Acres.	Acres.	Acres.	
755	755	755	Not known.	
540	540	508	.....	
.....	.....	.....	.....	
540	540	508	474‡	‡ Division between "Kharif" and "Rabi" not available.
.....	.....	.....	.....	
71·52	71·52	67·28	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	

Revenue Department, and no statistics of its working are kept in this department. This where tank irrigation is used to tide over long breaks in the monsoon. Slight increases in

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR WHICH

Name of Work—Gokák Canal, 2nd Section.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I.—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year,..	.....	.....	.....
2. Do. do. to end of year.	1,90,284	1,90,284	1,90,284
3. Interest charges to end of year ...	1,57,920	1,64,972	1,72,024
4. Net Revenue do. ...	.....	.....	.....
5. Total sum at charge do. ...	3,41,152	3,48,204	3,55,256
6. Revenue—Water-rate assessment ...	.....	.....	.....
7. Miscellaneous receipts do. ...	.....	.....	.....
8. Total (assessment) ...	.....	.....	.....
9. Total (collection) ...	.....	.....	.....
10. Refunds ...	.....	.....	.....
11. Working expenses ...	.....	.....	.....
12. Net Revenue based on assessment ...	.....	.....	.....
13. Percentage do. on Capital ...	.....	.....	.....
14. Net Revenue based on collection ...	.....	.....	.....
15. Percentage do. on Capital ...	.....	.....	.....
16. Gross assessed Revenue per acre irrigated .	.....	.....	.....
17. Working expenses do. ...	.....	.....	.....
18. Net assessed Revenue do. ...	.....	.....	.....
19. Cost of measurement do. ...	.....	.....	.....
20. Estimated value of crops irrigated ...	.....	.....	.....
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (as affecting storage) ...	.....	.....	.....
2. Do. (do. Irrigation) ...	.....	.....	.....
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	.....	.....	.....
4. Area irrigated, Kharif	.....	.....	.....
5. Do. Rabi	.....	.....	.....
6. Do. Total	.....	.....	.....
7. Area applied for (Total)	.....	.....	.....
8. Percentage irrigated of total culturable area under command	.....	.....	.....
9. Lowest supply reached during the year M. C. Ft.	.....	.....	.....
10. Date on which supply was lowest per Item 9.	.....	.....	.....
11. Supply entering the Canal at head, average discharge in cubic feet per second. { Kharif ,..	.....	.....	.....
{ Rabi ...	.....	.....	.....
12. Supply utilised do. { Kharif...	.....	.....	.....
{ Rabi ...	.....	.....	.....
13. Duty per cubic foot per second . { Kharif...	.....	.....	.....
{ Rabi ...	.....	.....	.....

General Remarks.—The work is

REPORT, 1899-1900 TO 1901-1902.

CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Ghatprabha River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
.....	.....	.....	894	
1,90,284	1,90,284	1,90,284	1,90,284	
1,72,024	1,50,868	1,29,712	1,08,556	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
.....	.....	.....	.....	
3,55,256	3,34,100	3,12,944	2,91,788	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
Inches.	Inches.	Inches.	Inches.	
.....	.....	.....	.....	
.....	.....	.....	.....	
Acres.	Acres.	Acres.	Acres.	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
.....	.....	.....	.....	
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.....	.....	.....	.....	

in abeyance.

DECCAN AND GUJARA'T TRIENNIAL

PROVINCIAL—MINOR WORKS AND NAVIGATION—WORKS FOR

Name of Work—Gokák Canal—First Section and Storage Works.

Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4
I—Financial Results.	Rs.	Rs.	Rs.
1. Capital outlay, direct and indirect, during the year...	10,258	17,701	9,829
2. Do. do. to end of year*.	13,17,002	13,34,703	13,44,532
3. Interest charges to end of year ...	5,85,095	6,36,115	6,87,445
4. Net Revenue do. ...	1,84,339	2,07,727	2,38,556
5. Total sum at charge do. ...	16,95,642	17,35,459	17,72,920
6. Revenue—Water-rate assessment ...	24,787	26,073	37,167
7. Miscellaneous receipts do. ...	14,657	12,885	15,267
8. Total (assessment) ...	39,444	38,958	52,434
9. Total (collection) ...	35,363	31,843	38,990
10. Refunds ...	14	4	17
11. Working expenses ...	6,776	8,451	8,144
12. Net Revenue based on assessment ...	32,668	30,507	44,290
13. Percentage do. on Capital ...	2·48	2·29	3·29
14. Net Revenue based on collection ...	28,573	23,388	30,829
15. Percentage do. on Capital ...	2·17	1·75	2·29
16. Gross assessed Revenue per acre irrigated†.	2·98	2·53	2·66
17. Working expenses do. ...	0·80	0·80	0·57
18. Net assessed Revenue do. ‡ ...	2·18	1·73	2·09
19. Cost of measurement do. ...	1 anna	11 pies	9 pies
20. Estimated value of crops irrigated ...	24,887	2,95,173	4,05,724
II.—Working details.	Inches.	Inches.	Inches.
1. Rainfall (Total)	13·47	14·72	14·08
2. Do. (as affecting Irrigation) ...	11·62	14·11	11·30
	Acres.	Acres.	Acres.
3. Total culturable area under command ...	17,627	17,627	17,627
4. Area irrigated, Kharif	4,679	6,395	10,308
5. Do. Rabi	3,745	4,113	4,027
6. Do. Total	8,424	10,508	14,335
7. Area applied for (Total)	7,927	9,492	9,962
8. Percentage irrigated of total culturable area under command	47·79	59·61	81·32
9. Lowest supply reached during the year M. C. Ft.	.....	Tank ran dry.	94
10. Date on which supply was lowest per Item 9.	.....	16th April 1900.	June 1901
11. Supply entering the Canal at head, average discharge in cubic feet per second. Kharif...	37·55	31·92	46·01
11. Supply entering the Canal at head, average discharge in cubic feet per second. Rabi ...	27·11	45·57	44·70
12. Supply utilised do ... Kharif...	37·55	31·92	46·01
12. Supply utilised do ... Rabi ...	27·11	45·57	44·70
13. Duty per cubic foot per second. Kharif ...	124·61	194·84	213·73
13. Duty per cubic foot per second. Rabi ...	180·34	101·84	119·88

General Remarks.—Though the revenue from all sources is improving steadily the The unsatisfactory nature of the monsoon during seasons under report may have effected include the charge for water-power to the Gokák mills.

REPORT, 1899-1900 TO 1901-1902.

WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT.

Source of Supply—Ghatprabha River.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
5	6	7	8	9
Rs.	Rs.	Rs.	Rs.	
12,596	31,720	56,595	1,00,458	
13,44,532	13,06,744	12,11,583	10,41,798	The figures in columns 5, 6, 7 and 8 relate to end of triennial period.
6,87,445	5,34,406	3,88,267	2,52,242	
2,38,556	1,55,766	91,346	39,220	
17,72,920	16,60,319	14,78,393	12,26,030	* Including expenditure charged to "35—Construction of Protective Irrigation Works."
29,342	16,692	11,483	9,333	
14,270	13,871	10,384	7,158	
43,612	30,563	21,867	16,491	
35,399	28,492	23,483	14,926	
12	.....	9	8	
7,790	7,018	6,098	5,166	
35,822	23,545	15,769	11,325	
2·66	1·80	1·30	1·09	
27,597	21,474	17,376	9,752	
2·05	1·64	1·43	0·93	
2·70	2·75	2·69	2·08	† Excluding receipts from mills
0·70	1·12	1·40	1·13	
2·00	1·63	1·29	0·95	‡ Do. do.
11 pies	1 anna 5 pies	2 annas 7 pies	2 annas 8 pies	
2,41,928	63,164	1,07,398	1,42,362	
Inches.	Inches.	Inches.	Inches.	
14·09	17·69	22·86	19·38	Rainfall at Dhupdal.
12·34	16·36	20·98	19·69	
Acres.	Acres.	Acres.	Acres.	
17,627	17,627	17,627	17,627	
7,127	4,215	3,201	3,004	
3,962	2,077	1,154	1,561	
11,089	6,292	4,355	4,565	
9,127	5,766	4,039	4,205	
62·90	35·69	24·70	25·90	
.....	.....	.....	.....	
.....	.....	.....	.....	
38·49	22·43	14·95	18·93	
39·13	25·57	20·28	26·99	
38·49	22·43	14·95	18·93	
39.13	25·57	20·28	26·99	
177·73	213·18	215·33	158·33	
134·02	139·16	112·33	86·33	

collections are not satisfactory. The cost of measurement has decreased considerably. the results, but the demand for water is steadily improving. The miscellaneous receipts

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MINOR WORKS AND NAVIGATION.

WORKS FOR WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

(DECCAN AND GUJARAT.)

Items.	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4.	5
1	Number of Works...	66	66	66
		Acres.	Acres.	Acres.
2	Area irrigated	10,783	10,783	* .....
	Revenue.	Rs.	Rs.	Rs.
3	Irrigation share of consolidated Revenue collected in the Civil Department ...	21,830	21,830	* .....
4	Direct Receipts—Water-rates from Irrigation and Miscellaneous Receipts ...	.....	.....	28
	Deduct—Refunds	.....	.....	.....
5	Total, Revenue	21,830	21,830	28
6	Net Revenue	15,457	9,822	—20,735
	Working Expenses.			
7	Extensions and Improvements	.....	.....	6,242
8	Maintenance and Repairs	3,400	8,527	8,373
9	Establishment	770	1,270	5,773
10	Tools and Plant	20	28	375
11	Share of Collection Charges in the Civil Department	2,183	2,183	.....
12	Total, Working Expenses...	6,373	12,008	20,763

REPORT, 1899-1900 TO 1901-1902.

WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

District.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
66	66	66	66	
Acres.	Acres.	Acres.	Acres.	
7,189	10,794	10,810	10,716	* No land was irrigated owing to there being no water, hence no revenue was realized.
Rs.	Rs.	Rs.	Rs.	
14,554	21,879	21,921	15,934	
9	38	4	50	
.....	.....	.....	.....	
14,563	21,917	21,925	15,984	
1,515	15,972	13,727	12,641	
2,081	562	1,350	588	
6,767	2,289	2,923	809	
2,604	873	1,684	344	
141	29	48	4	
1,455	2,192	2,193	1,598	
13,048	5,945	8,198	3,343	

MINOR WORKS AND NAVIGATION—WORKS FOR

Kaira

Items.	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
1	Number of Works...	2	2	2
		Acres.	Acres.	Acres.
2	Area irrigated	8,567	8,557	9,005
	Revenue.	Rs.	Rs.	Rs.
3	Irrigation share of consolidated Revenue collected in the Civil Department ..	47,354	47,324	48,183
4	Direct Receipts—Water-rates from Irrigation and Miscellaneous Receipts ...	114	258	157
	Deduct—Refunds	... ...	.....	.....
5	Total, Revenue	47,468	47,582	48,340
6	Net Revenue	36,698	39,031	31,620
	Working Expenses.			
7	Extensions and Improvements	210	913	.....
8	Maintenance and Repairs	4,688	2,401	9,916
9	Establishment	1,109	493	1,865
10	Tools and Plant	28	11	121
11	Share of Collection Charges in the Civil Department	4,735	4,733	4,818
12	Total, Working Expenses	10,770	8,551	16,720

REPORT, 1899-1900 TO 1901-1902.

WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

District.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
2	2	2	2	
Acres.	Acres.	Acres.	Acres.	
8,710	8,351	7,757	8,116	
Rs.	Rs.	Rs.	Rs.	
47,620	46,087	28,497	28,471	
176	121	982	530	
.....	.....	.....	.....	
47,796	46,208	29,479	29,001	
35,783	34,899	20,505	16,248	
374	1,032	1,991	4,427	
5,668	3,831	3,042	3,499	
1,156	1,775	1,958	1,925	
53	63	63	26	
4,762	4,608	1,920	2,876	
12,013	11,309	8,974	12,753	

Items.	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
1	Number of Works	288	288	281
		Acres.	Acres.	Acres.
2	Area irrigated	12,288	12,278	12,624
	Revenue.	Rs.	Rs.	Rs.
3	Irrigation share of consolidated Revenue collected in the Civil Department ...	46,800	46,528	34,206
4	Direct Receipts—Water-rates from Irrigation and Miscellaneous Receipts ...	77	36	95
	Deduct—Refunds	.....	.....	.....
5	Total, Revenue	46,877	46,564	34,301
6	Net Revenue	42,158	32,312	—1,527
	Working Expenses.			
7	Extensions and Improvements	.....	231	79
8	Maintenance and Repairs	25	7,289	25,656
9	Establishment	7	1,968	6,280
10	Tools and Plant	.....	108	383
11	Share of Collection Charges in the Civil Department.	4,687	4,656	3,430
12	Total, Working Expenses	4,719	14,252	35,828

REPORT, 1899-1900 TO 1901-1902.

WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

District.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
281	288	291	290	The figures in columns 6 to 9 relate to end of the triennial period.
Acres.	Acres.	Acres.	Acres.	
12,397	12,318	12,369	12,369	
Rs.	Rs.	Rs.	Rs.	
42,511	47,533	49,399	49,391	
69	236	410	389	
.....	.....	.....	.....	
42,580	47,769	49,809	49,780	
24,314	33,990	19,597	41,470	
103	.....	9,078	485	
10,990	7,186	10,996	2,158	
2,751	1,712	4,867	650	
164	107	293	40	
4,258	4,774	4,978	4,977	
18,266	13,779	30,212	8,310	

MINOR WORKS AND NAVIGATION—WORKS FOR

Khándesh

Items.	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
1	Number of Works...	82	82	82
		Acres.	Acres.	Acres.
2	Area irrigated	8,477	9,053	8,453
	Revenue.	Rs.	Rs.	Rs.
3	Irrigation share of consolidated Revenue collected in the Civil Department ...	57,822	59,096	57,446
4	Direct Receipts—Water-rates from Irrigation and Miscellaneous Receipts ...	233	46	61
	Deduct—Refunds	.....	.....	.....
5	Total, Revenue	58,055	59,142	57,507
6	Net Revenue	19,274	35,499	39,849
	Working Expenses.			
7	Extensions and Improvements	15,319	6,141	4,542
8	Maintenance and Repairs	2,413	1,730	76
9	Establishment	14,816	9,663	7,124
10	Tools and Plant	428	196	170
11	Share of Collection Charges in the Civil Department	5,805	5,913	5,746
12	Total, Working Expenses	38,781	23,643	17,658

REPORT, 1899-1900 TO 1901-1902.

WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

District.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
82	82	82	82	
Acres.	Acres.	Acres.	Acres.	
8,661	9,111	9,112	8,907	
Rs.	Rs.	Rs.	Rs.	
58,122	58,266	58,647	57,541	
113	238	48	78	
.....	.....	.....	.....	
58,235	58,504	58,695	57,619	
31,541	20,869	26,121	25,052	
8,667	12,664	10,464	5,038	
1,406	2,893	1,675	2,993	
10,534	15,923	14,208	18,084	
265	304	363	657	
5,822	5,851	5,864	5,795	
26,694	37,635	32,574	32,567	

Items.	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
1	Number of Works	271	271	271
		Acres.	Acres.	Acres.
2	Area irrigated	27,879	27,482	27,518
	Revenue.	Rs.	Rs.	Rs.
3	Irrigation share of consolidated Revenue collected in the Civil Department ...	1,62,214	1,62,565	1,62,524
4	Direct Receipts—Water-rates from Irrigation and Miscellaneous Receipts ...	837	1,438	744
	Deduct—Refunds	.....	.....	.....
5	Total, Revenue	1,63,051	1,64,003	1,63,268
6	Net Revenue	1,29,309	1,34,746	1,13,016
	Working Expenses.			
7	Extensions and Improvements ...	8,943	3,194	9,056
8	Maintenance and Repairs	295	1,246	2,444
9	Establishment	7,861	8,132	21,888
10	Tools and Plant	346	285	543
11	Share of Collection Charges in the Civil Department	16,297	16,400	16,321
12	Total, Working Expenses	33,742	29,257	50,252

REPORT, 1899-1900 TO 1901-1902.

WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

District.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
271	271	271	271	
Acres.	Acres.	Acres.	Acres.	
27,626	28,456	28,360	28,361	
Rs.	Rs.	Rs.	Rs.	
1,62,434	1,62,439	1,61,384	1,61,703	
1,007	1,337	1,359	1,432	
.....	.....	.....	20	
1,63,441	1,63,776	1,62,743	1,63,115	
1,25,691	1,13,567	92,551	1,02,635	
7,064	11,337	17,502	6,608	
1,328	2,786	3,996	6,058	
12,627	19,147	31,790	30,351	
392	565	646	1,211	
16,339	16,374	16,258	16,252	
37,750	50,209	70,192	60,480	

Items	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
1	Number of Works	67	67	67
		Acres.	Acres.	Acres.
2	Area irrigated	9,910	9,910	9,910
	Revenue.	Rs.	Rs.	Rs.
3	Irrigation share of consolidated Revenue collected in the Civil Department ...	33,049	33,049	33,049
4	Direct Receipts—Water-rates from Irrigation and Miscellaneous Receipts ...	78	10	58
	Deduct—Refunds	.....	.....	.....
5	Total, Revenue	33,127	33,059	33,107
6	Net Revenue	17,384	15,388	7,300
	Working Expenses.			
7	Extensions and Improvements ...	.....	.....	.....
8	Maintenance and Repairs	9,929	11,258	17,882
9	Establishment	2,279	2,589	4,113
10	Tools and Plant	230	519	507
11	Share of Collection Charges in the Civil Department	3,305	3,305	3,305
12	Total, Working Expenses	15,743	17,671	25,807

REPORT, 1899-1900 TO 1901-1902.

WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

District.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
67	67	67	67	
Acres.	Acres.	Acres.	Acres.	
9,910	9,910	9,910	9,910	
Rs.	Rs.	Rs.	Rs.	
33,049	33,049	32,977	30,857	
49	108	1	.....	
.....	.....	.....	.....	
33,098	33,157	32,978	30,857	
13,358	16,563	22,076	25,232	
.....	.....	1,325	234	
13,023	10,363	3,766	1,793	
2,993	2,373	2,246	512	
419	553	267	.....	
3,305	3,305	3,298	3,086	
19,740	16,594	10,902	5,625	

Items.	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
1	Number of Works	473	473	473
		Acres.	Acres.	Acres.
2	Area irrigated	49,567	53,798	54,321
	Revenue.	Rs.	Rs.	Rs.
3	Irrigation share of consolidated Revenue collected in the Civil Department ...	1,73,027	1,72,898	1,72,947
4	Direct Receipts—Water-rates from Irrigation and Miscellaneous Receipts ...	2,351	3,752	3,037
	Deduct—Refunds	.....	.....	.....
5	Total, Revenue	1,75,378	1,76,650	1,75,984
6	Net Revenue	82,586	77,961	82,241
	Working Expenses.			
7	Extensions and Improvements ...	270	10	44
8	Maintenance and Repairs	41,888	51,996	45,501
9	Establishment	30,836	27,938	28,772
10	Tools and Plant	2,333	1,255	1,877
11	Share of Collection Charges in the Civil Department	17,465	17,490	17,549
12	Total, Working Expenses	92,792	98,689	93,743

REPORT, 1899-1900 TO 1901-1902.

WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

District.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
473	*473	474	471	The figures in columns 6 to 9 relate to end of the triennial periods.
Acres.	Acres.	Acres.	Acres.	* One village transferred to the Kánara Collectorate.
52,562	62,528	62,348	64,233	
Rs.	Rs.	Rs.	Rs.	
1,72,957	1,72,937	1,72,325	1,70,993	
3,047	2,320	1,912	1,211	
.....	.....	.....	.....	
1,76,004	1,75,257	1,74,237	1,72,204	
80,929	98,491	78,234	1,16,051	
108	4,847	13,624	4,649	
46,462	27,400	28,844	15,483	
29,182	26,183	34,311	18,486	
1,822	888	1,836	342	
17,501	17,448	17,388	17,193	
95,075	76,766	96,003	56,153	

DECCAN AND GUJARAT TRIENNIAL

MINOR WORKS AND NAVIGATION—WORKS FOR

Panch Mahâls, Broach, Ahmednagar, Poona,

Items	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
1	Number of Works	56	66	54
		Acres.	Acres	Acres.
2	Area irrigated	4,437	4,549	3,966
	Revenue.	Rs.	Rs.	Rs.
3	Irrigation share of consolidated Revenue collected in the Civil Department ...	18,008	16,958	13,196
4	Direct Receipts—Water-rates from Irrigation and Miscellaneous Receipts ...	966	2,041	596
	Deduct—Refunds	.....	.....	.....
5	Total, Revenue	18,974	18,999	14,092
6	Net Revenue	3,188	13,297	7,070
	Working Expenses.			
7	Extensions and Improvements ...	.....	132	2,428
8	Maintenance and Repairs	10,536	3,025	2,198
9	Establishment	3,216	740	940
10	Tools and Plant	162	46	61
11	Share of Collection Charges in the Civil Department	1,872	1,759	1,395
12	Total, Working Expenses	15,786	5,702	7,022

REPORT, 1899-1900 TO 1901-1902.

WHICH ONLY REVENUE ACCOUNTS ARE KEPT.

Sátára, Bijápur, Ratnágiri and Kánara Districts.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
54	56	55	52	The figures in columns 6 to 9 relate to end of the triennial period.
Acres.	Acres.	Acres.	Acres.	
4,317	4,517	4,370	3,170	
Rs.	Rs.	Rs.	Rs.	
16,154	16,987	16,811	13,894	
1,201	669	820	980	
.....	.....	.....	.....	
17,355	17,656	17,631	14,874	
7,852	10,195	9,034	6,228	
853	7	1,245	35	
5,253	4,397	2,395	1,264	
1,632	1,240	3,146	5,862	
90	58	52	10	
1,675	1,759	1,759	1,475	
9,503	7,461	8,597	8,646	

MINOR WORKS AND NAVIGATION.

WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.

(DECCAN AND GUJARAT.)

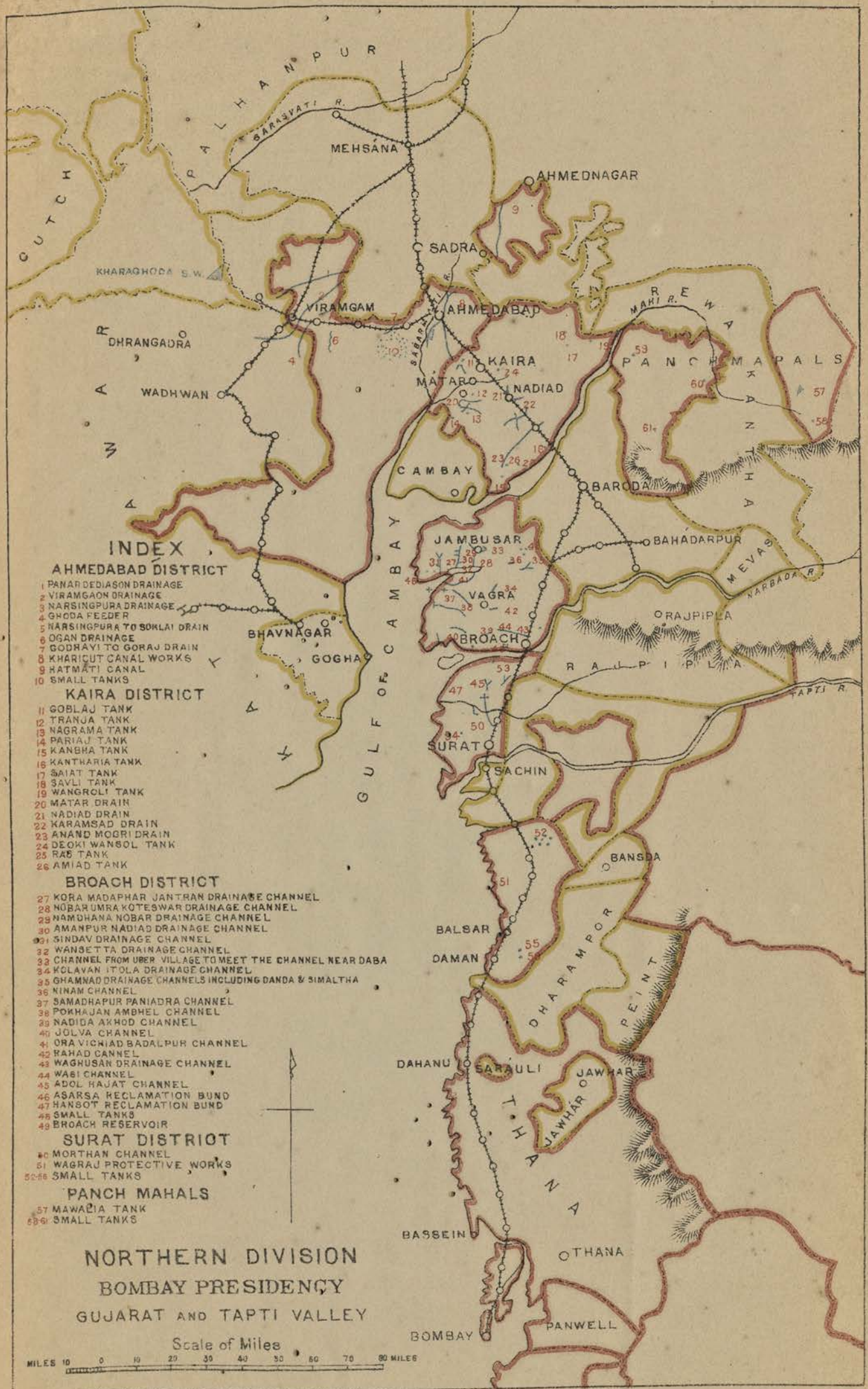
Minor Works and Navigation.—Works for which neither

No.	Particulars.	1899-1900.	1900-1901.	1901-1902.
1	2	3	4	5
		Acres.	Acres.	Acres.
1	Area cultivated *	3,738	3,249	3,682
	Revenue.	Rs.	Rs.	Rs.
2	Land share of consolidated Revenue collected in the Civil Department * ...	12,726	10,725	12,474
3	Irrigation share of do.* ...	.....	34	.....
4	Miscellaneous Receipts	900	671	3,752
5	*Deduct* Refunds	.....	.....	.....
6	Total Irrigation Revenue (3+4—5) ...	900	705	3,752
	Expenditure.			
7	New Works	29,681	1,01,397	1,43,264
8	Maintenance and Repairs	6,927	13,615	18,537
9	Establishment	8,286	12,718	19,773
10	Tools and Plant	415	402	618
11	Suspense Account	3,690	—245	—1,929
12	Total Expenditure	48,999	1,27,887	1,80,263

REPORT, 1899-1900 TO 1901-1902.

Capital nor Revenue Accounts are kept.

Average for the triennium under report.	1896-97 to 1898-99.	1893-94 to 1895-96.	1890-91 to 1892-93.	Remarks.
6	7	8	9	10
Acres.	Acres.	Acres.	Acres.	
3,556	3,714	3,461	2,499	* The area and revenue are in respect of the Drainage Channels in the Broach District.
Rs.	Rs.	Rs.	Rs.	
11,975	12,608	11,855	8,688	
11	.....	.....	.....	
1,774	537	535	771	
.....	.....	.....	.....	
1,785	537	535	771	
91,447	41,608	14,051	14,088	
13,026	8,985	8,313	6,160	
13,592	9,931	5,869	6,926	
478	1,518	98	223	
506	614	—299	580	
1,19,049	62,686	28,032	27,977	



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NORTHERN DIVISION
BOMBAY PRESIDENCY
GUJARAT AND TAPTI VALLEY

Scale of Miles

MILES 10 0 10 20 30 40 50 60 70 80 MILES

Photozincographed from a Tracing

POONA
WORKS IN OPERATION.
1 LAKE WHITING
NIRA CANAL
2 SHETPHAL.
3 LAKE FIFE.
MUTHA CANALS.
4 MATOBA.
5 KASURDI.
6 SHIRSUPHAL.
7 BHADULWADI.
INCOMPLETE WORKS
8 KHAMGAON.
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AHMEDNAGAR.
WORKS IN OPERATION
1 OJHAR L.B.CANAL.
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3 LAKH CANAL.
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INCOMPLETE WORKS
5 MUSALWADI.
6 VISAPUR.
IMPORTANT BANDHARAS
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SHOLAPUR.
WORKS IN OPERATION
1 EKRUK.
2 MHASWAD.
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INCOMPLETE WORKS.
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8 PATHRI.
9 WADSHIVANE.
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NASIK
WORKS IN OPERATION
1 WAGHAD TANK.
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INCOMPLETE WORKS.
5 KHIRDI SATTA.
6 ODAL.
7 WASSALI.
IMPORTANT BANDHARAS
8 NIPHAD.
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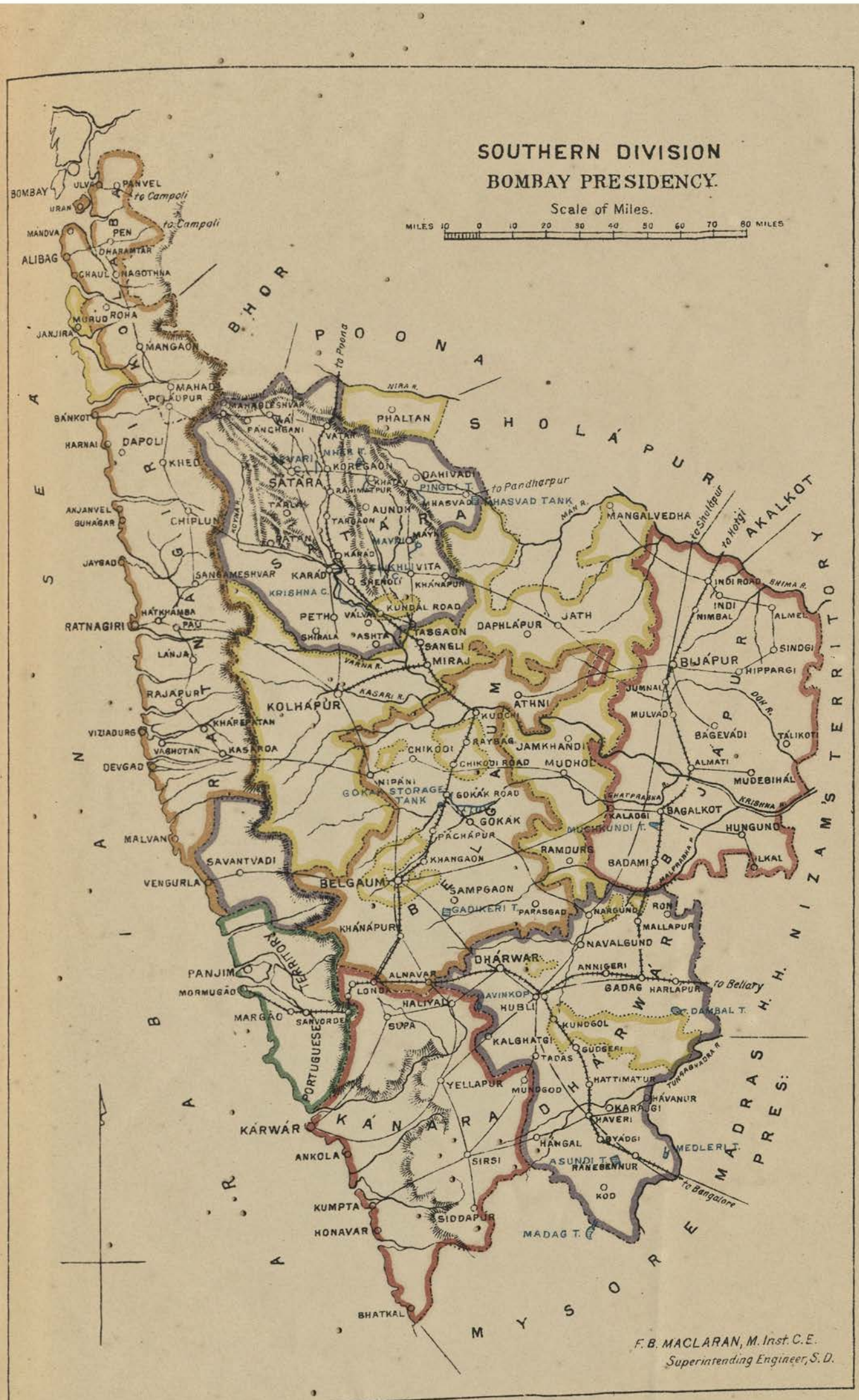
10 BEZ.
11 PATNA.
12 NAMPUR.
13 WADEL.
14 SANGAMESHWAR.
15 AMALNER.
16 SAMODA.
17 DHULIA.
18 BETAWAD.

CENTRAL DIVISION
BOMBAY PRESIDENCY

Scale of Miles

Drawn and Photozincographed
Govt Photozinco. Office, Poona. 1903.



Drawn and reduced to Scale
Govt Photozinco Office, Poona, 1903.

Triennial Revenue Report of Irrigation Works in the Bombay Presidency, excluding Sind, for 1899-1900 to 1901-1902—Review of the.

No. W. I.—2016 of 1903.

Public Works Department, Bombay Castle, 17th August 1903.

Read—

Triennial Revenue Report of Irrigation Works in the Bombay Presidency, excluding Sind, for 1899-1900 to 1901-1902.

RESOLUTION.—Copies of the Report should be forwarded to the Government of India and the Secretary of State.

2. It has been somewhat difficult to decide the form the report should take, but it is hoped the statements prepared for each canal or group of canals will enable the position of irrigation in the Deccan and Gujarát during the past triennium as compared with the previous ones to be appreciated. Minor details as to the working in any particular year can be obtained from the Annual Reports which have been published.

3. The whole question regarding the efficiency, management and progress of the Deccan Irrigation Works was fully discussed some 9 years ago, which discussion culminated in this Government's letter to the Government of India, No. 134 W. I.—1688, dated 31st October 1894, a copy of which is attached. There is no doubt there are signs that the people generally are becoming more alive to the benefits of irrigation especially during years of drought, while on some of the canals the area under irrigation is limited only by the storage available. There can be no doubt that the works, though not directly profitable to Government, have been of very great use in mitigating distress.

4. His Excellency the Governor in Council regrets the delay in the submission of this report, the figures in which required careful compilation which was greatly interfered with by the heavy pressure of work caused by the recent famine.

H. O. B. SHOUBRIDGE,
Under Secretary to Government.

To

The Revenue Department, Secretariat.
The Financial Department, Secretariat.
The Commissioner in Sind.
The Commissioner, N. D.
The Commissioner, C. D.
The Commissioner, S. D.

[P. T. O.

The Director of Land Records and Agriculture.
The Chief Engineer, C. D.
The Superintending Engineer, N. D.
The Superintending Engineer, S. D.
The Superintending Engineer on Special Duty.
The Superintending Engineer, Indus Right Bank Division.
The Superintending Engineer, Indus Left Bank Division.
The Secretary, Indus River Commission.
All Executive Engineers having charge of Irrigation Works, Deccan and Gujarát.
The Examiner of Public Works Accounts.
The Government of India. } (By letter.)
The Secretary of State for India. }
The Editors' Table.

Class A.
Exd. C. S. P.

No. of 1903.

Copy forwarded for information and guidance to

(Accompaniment to G. R. No. W. I.—2016, dated 17th August 1903.)

No. 134 W. I.—1685 OF 1894.

PUBLIC WORKS DEPARTMENT.
Bombay Castle, 31st October 1894.

FROM

THE SECRETARY TO THE GOVERNMENT OF BOMBAY;

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

VIII.—Irrigation (Works.)

SIR,

I am directed to reply as below to the questions raised in paragraph 9 of the Resolution of the Government of India, Public Works Department, No. 53 I., dated 9th March 1893, reviewing the Revenue Report of Irrigation Works in the Bombay Presidency (excluding Sind) for 1891-92.

2. The questions are three in number:—

(1.)—Why has not greater progress been achieved in extending the irrigated areas below new works of irrigation in the Deccan?

(2.)—What is the efficiency of the several works in furnishing a water-supply for cultivation in seasons of deficient rainfall? and

(3.)—Are these works managed with a careful regard to their effective utilization for that service?

3. Nos. (2) and (3) of these questions have reference to seasons of deficient rainfall, but No. (1) should, it is thought, be considered first of all with reference to years of good or normal rainfall, as a spasmodic increase in area which may be caused by deficient rainfall is no criterion of the extension of irrigation, for most of it is likely to cease with the cause that produced it. I am accordingly directed to deal with question No. (1) from this standpoint, and I am in the first place to offer a few general observations on the conditions which obtain in the Deccan, so that the Government of India may be placed in possession of data which will enable them to obtain a more accurate idea of the circumstances than it is believed has yet been placed before them.

4. The Deccan formation is of volcanic origin, and the country is rugged and broken up, stretches of barren rocky high land alternating with fertile valleys, the descent from the former into the latter being marked by the gradually increasing depth and richness of the soil, which varies from a poor shallow red to a rich black soil often of considerable depth, the product of centuries of denudation of the volcanic rocks. Given a sufficient and timely rainfall, this soil is capable of producing ample crops. There are no perennial rivers of any size, the feature of the country being the numerous rain-fed 'nálas,' in flood for perhaps a few hours at a time and dry for many months of the year. This country produces, in the valleys, an ample supply of food crops in years of good or normal rainfall, but the result of a failure of the monsoon rain is, as the Government of India are too well aware, a failure of crops and widespread distress, and it is here, with a view to provide in some measure against the uncertainties of the rainfall, that the majority of the works in question have been constructed. The works consist for the most part of reservoirs, formed by damming up some of the rain-fed torrents, to store for future use some of the many millions of cubic feet of water which run to waste in the monsoon season, but others consist of weirs to raise the level of some of the better fed streams whence distributing channels are led to the land under command.

5. The conditions thus differ essentially from those which obtain in the Panjáb and Sind (for instance), and no comparison of results with what is obtained in those provinces is possible.

6. In such years as are being considered, *viz.* years of normal rainfall, it may be generally assumed that no irrigation is required for the ordinary staple crops, and the use of the available water is, roughly speaking, confined to (1) perennial and special hot-weather crops, and (2) to a certain limited quantity of rabi and to rice, ground-nuts, and other crops which depend on a timely and sufficient supply of water. There is an essential difference in the character of the water of reservoirs as compared with that of deltaic rivers. Whereas the waters of such a river as the Indus carry with them for distribution, free of charge and without labour, a most valuable manure in their silt, crops irrigated from reservoirs or clear water streams require artificial manuring at considerable expense to the farmer. Perennial crops especially require heavy manuring, and on the removal of the crop, the ground is sufficiently enriched to serve for 2 or 3 seasons of rabi or special eight-months' kharif crops. The cultivator in the Deccan does not, as a rule, find it profitable to manure his land for a rabi crop alone, and the use of canal water, as already stated, necessitates manure. But after a perennial crop has been removed, he has not to go to the expense of any further manuring, and for the small water charge only he obtains a superior rabi crop, the superiority of which, however, over an unirrigated crop would not, as a rule, be sufficient to justify the required extra outlay on manure.

7. It will be seen then that there are two factors which determine the probable extent of irrigation under the ordinary irrigation works of the Deccan, and these are firstly and mainly the water-supply which can be depended upon to irrigate perennial crops *in the hot season*, and secondly the available supply of manure. There is a third factor, *viz.*, the wealth of the cultivator, but this will not help him if the water-supply is deficient, though it is only a well-to-do rayat who can afford the outlay necessary to grow special crops.

8. The area of perennial irrigation being practically limited by the assured hot-weather supply of water, it follows that the total area is, to a great extent, dependent on the hot-weather supply.

9. It will be understood that this is a generalization only, the irrigation of ground-nut, for instance, which is in increasing favour, being independent of this rule, as is also rice irrigation, and these two in 1892-93 accounted for 14,000 out of the 66,000 acres irrigated, but it affords a very fair explanation of the reason why the area does not increase more rapidly. Irrigators under these works have seen the water in the tank or in the river very low, or even fail completely in the hot season after an unfavourable monsoon. There is always the risk of this, and they naturally hesitate to go to the expense of preparing their fields unless they have wells to fall back upon, and it has often been necessary on many of the works to grant applications only to those who have such wells.

10. In the opinion of this Government, therefore, it is the uncertainty of the hot-season supply that mainly limits the extension of perennial irrigation, and it is the fact that the ordinary rainfall suffices for the staple food-grains, while the use of canal water necessitates the expense of manuring, that prevents, as a general rule in ordinary years, the extensive irrigation of other classes of crops beyond such as are grown in rotation with perennial crops.

11. I am to say that the remarks in regard to supply should not be held as applicable to the Mutha, Nira, or Krishna Canals. The two former are supplied from large reservoirs, with catchment areas favoured with unfailing rainfall, and the Krishna Canal takes off from a river, the hot-weather discharge of which is always considerable. The Nira Canal is not yet fully developed, and is avowedly a 'Protective' Work, while the others have special facilities as regards communication and proximity to large markets.

12. The very nature of the majority of these works renders the hot-weather supply, which is such a main factor in their utility, an uncertainty. Whereas in the case of the Mutha and Nira Canals, the reservoirs are fed by ghát rainfall which never fails, the Ekruk, Ashti, Mhaswa, Bhádalwádi, Medhri and other tanks similarly situated depend for their supply on local rainfall, and not only on the total amount of such rainfall but on the manner in which it falls, a few heavy rain storms doing more to fill the tank than

weeks of light soaking showers which, instead of running off to replenish the tank, soak into the ground. And similarly there is like uncertainty as to the hot-weather supply in the Pravara river (Lákh and Ojhar Canals) and in the Girna river (Jámda Canals), both of which rivers have failed completely in the hot-weather. Results as regards these canals would be very much improved, were storage tanks fed from ghát rainfall constructed for them, and such reservoirs are projected at Sámrad for the Ojhar and Lákh Canals, and at Chankápur for the Jámda Canals.

13. The extension of means of communication has to some extent aided in such increase in irrigated area as has taken place, by rendering the importation of manure and the export of produce to markets cheaper and more rapid, and further extension on this account may be looked for on some of the better situated works, and also some development in regard to rice, ground-nuts, &c.; but this Government fear that development will not be rapid. I am to say that His Excellency the Governor in Council has arrived at this conclusion with reluctance, but considers that the time has arrived when all idea that the irrigation under these works will approximate to the figures originally estimated should be put aside.

14. That even in a year of deficient rainfall, such as 1891-92, the irrigated area did not increase to a greater extent is due to the fact that the cultivator, who is not accustomed to irrigation, hesitates to apply for water until the very last moment, in the hope that the rain may yet fall in time to save his crop, and he often waits so long that the time has passed before he can make the necessary arrangements, and the crop is lost. At such a time too the land is full of cracks and absorbs so much water that only a limited number of applicants can be supplied, and in addition to this the dry-crop fields not being levelled, if water is turned on to them the lower portions are flooded and more harm than good may be done, while the higher portions do not get water enough.

15. The second and third questions relating to the efficiency of the works to afford supply in time of deficient rainfall may be taken together. As stated above, the nature of the majority of these works is such that if the rain fails they also fail, and thus, when wanted most, they are of least use. But as there is never a *complete* failure of rain there will always be *some* supply during the monsoon which could be applied to save dry crops, and given a good season the year before, some of the tanks would have a balance to start on; but in a bad year following on an indifferent one such works would be useless, as a rule, for protective duty. It is to be noted also that, whereas it cannot be said earlier than July or August that the first rainfall is deficient, it may be that the second rainfall in September or October will be very good, and then the additional rabi cultivation will in many cases compensate the rayat for short kharif, and cultivators hold back often in the hope of this. Should the later rains also fail, there will be increased demands for rabi irrigation, and the tank insufficiently replenished itself, and already pledged to supply perennial crops, will very probably be unequal to the demand.

16. To be always ready to give water in case of a failure of rainfall, it would be necessary to always maintain the water in the reservoirs at a certain height, which would mean the practical cessation of perennial irrigation, to which is due almost entirely such revenue as is derived from these works in normal years; and it would also be necessary to keep in proper order additional lengths of channels to convey the water, should it be wanted, to fields which now never so much as see it, and to keep the main canals ready to supply a quantity of water much in excess of what they are now ever called upon to supply. The works in fact are not now maintained with due regard to their efficiency for protective service, and to so maintain them would entail largely increased charges, and the sacrifice of the greater part of such revenue as is now derived from them; and I am to express the opinion of this Government that the protective service to be looked for from these works must be small. The Nira Canal and Mhaswad Tank, which are avowedly 'Protective,' are on a different footing, but the other works should, I am to submit, be managed mainly with regard to their productive and not their protective capacity. The extension of roads and

railways of recent years in the Deccan has modified and reduced the effect of any recurrence of such a year as 1876-77, and I am to say that even were the present revenue sacrificed to a great extent and the maintenance charges of these works largely increased, their effect in a time of scarcity on the production of food-grains would be inappreciable. The main result would be to prevent loss to the well-to-do rayats who now practise irrigation, and who are best prepared to meet a famine while in no appreciable degree, if at all, would they mitigate the sufferings of the really poor who are the first to feel the pinch of scarcity.

17. His Excellency the Governor in Council considers that to expect both a return on capital expenditure and efficiency for protection from scarcity, would, as regards the works in question, be to expect what is impossible. Managed with a view to revenue, these works have failed to realize the anticipations of their projectors, and though it is hoped that they may improve considerably, they are not, it is feared, likely to give any remunerative return on the capital expended on them. If instead of working them with a view to revenue, they were to be managed with a view to their efficiency for protecting ordinary crops in seasons of deficient rainfall, the financial outlook would be much more gloomy, and this Government are of opinion that it is better for the general prosperity that the greatest use should be made of the water, rather than that it should be held as a reserve and its efficiency as a producing agent seriously diminished.

18. Though the success of the majority of the works as commercial concerns cannot, it is feared, be looked for, there is no doubt that the water has added considerably to the wealth of the localities concerned. In 1892-93 the value of the irrigated crops grown on 65,487 acres was estimated at Rs. 39,47,775, and of this total 8,851 acres were under sugarcane, the produce being valued at Rs. 22,85,815. Though it may be necessary to abandon the idea that the irrigation works of the Deccan will play any important part in saving ordinary kharif crops in years of scanty rainfall, they will have considerable influence in producing the more expensive crops, and the wealth which they will create, and the labour which they will employ, will do something to mitigate distress in seasons of insufficient rainfall.

19. I am to state that your letter No. 199 I., dated 23rd August 1893, is receiving separate consideration, and will be replied to in due course.

I have the honour to be,
Sir,
Your most obedient Servant,
T. D. LITTLE,
Secretary to Government.

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